June 1891

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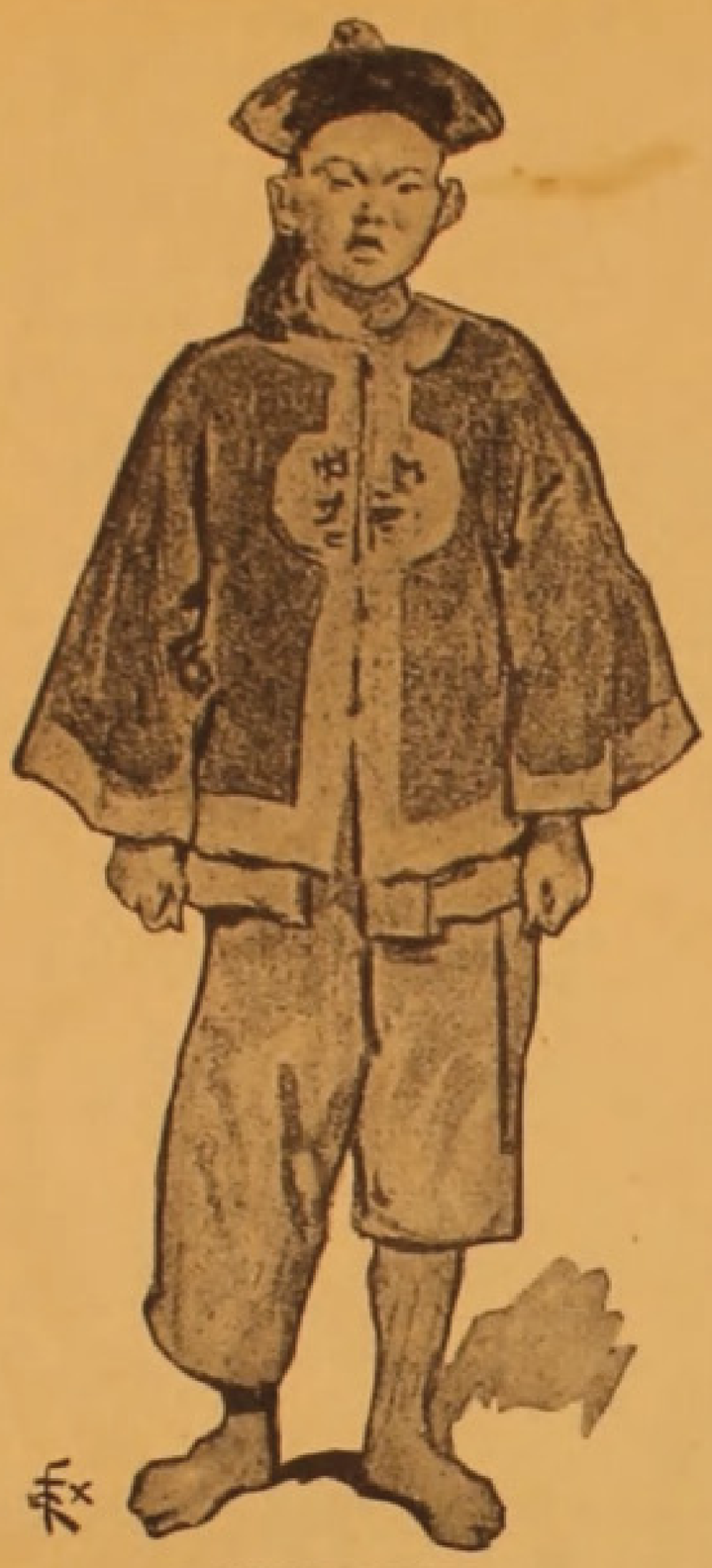
P. 406



A CHINESE SOLDIER.

"Oh! it is a military expedition that you wish to make. Are you aware that these islands are unapproachable? that they are inhabited by pirates? and that we have already attempted an excursion of this sort, to no purpose? Our pilots say they do not know the coasts. Besides, I may as well confess that I have received news which makes it impossible for me to send a single soldier or sailor away from Canton. The Taipings, it appears, are preparing a march to the south, and are certainly in accord with the bandits of the Ladrones; and as the latter are less to be feared than the rebels, I prefer not to divide my forces."

"What is to be done, then?"

"This is your business."

"If I dared to venture an opinion."

"I am listening."

"The governor of Hong-Kong, you know, has felt very bitter against the pirates, in spite of the satisfaction you have given him by the execution of ten of these wretches; perhaps, if you would permit, he would undertake to rid us of this cursed association."

"Very likely; but it is a serious matter to let foreigners meddle with our affairs. And, besides, it is not the attack upon the Ladrones which interests you, it is the capture of this Tchou; and they do not know him."

"Yes: but, your Highness," interrupted Ming, "if this expedition takes place, I shall certainly take part in it."

"You!" the viceroy cried, unable to repress a smile; for he knew that the legal luminary did not exactly shine because of his courage.

"I, myself!" repeated the magistrate, drawing himself up with a military air.

"Ah! that alters the case. I will consider your application. Are you sure that this expedition will suit the governor of Hong-Kong?"

"Oh! I am sure of it, very sure! Besides, an American ship-captain, who resides at Hong-Kong, said yesterday it was a pity your highness would not authorize the colony to put an end to the pirates, for it could very soon be done."

"Who is this captain?"

"Berins, Berting, Perkin: I do not know his name very well."

"You mean Captain Perkins, no doubt."

"Yes: that is it, prince, it is he! Perkins,—Captain Perkins."

"The commander of the schooner 'Lightning,' the famous smuggler."

"Ah! he is a smuggler?"

"You know that well, for you have given him his *choa*, his permit, at least twenty times, while you were mandarin at Boca-Tigris."

"It is possible. I do not remember it."

"My dear president, you have scarcely forgotten that this Perkins is your friend. I do not care to know what common interests ally you, but you probably owe to him all the information that you have given me about your assassin."

The viceroy uttered these words in such a severe tone that Ming, so proud as he had been at the beginning of the audience, trembled in every limb. However, he became somewhat reassured as the prince continued, rather more gently:

"On the other hand, all the efforts which you have made are too natural for me to condemn you. It may be that I shall accept the aid of this Perkins,—opium smuggler though he be. Circumstances are of such a nature that I do not wish to become embroiled with foreigners."

"Then I can tell ——"

"Not yet. You have almost two weeks before you, and I do not wish to commit myself to such an undertaking without careful thought."

"I shall await the orders of your highness."

"Very well: I will have you notified when I have come to a decision."

And motioning to his secretary to resume his interrupted work, the prince waved his hand to the great mandarin, who, understanding that there was nothing more for him to do but retire, almost bent his thick spine double, in spite of the effort it cost him.

Ming hastened away; but once outside the palace, he drew himself up haughtily, and, as soon as he had entered his palanquin, he stretched himself out luxuriously, saying,

"I begin to believe that I shall escape the 'one hundred blows with the bamboo.'"

He gave his porters orders to go to the Island of Honan,

PRINCE KONG'S SECRETARY.

where he hoped, with a perfectly legitimate desire, to take a little repose. Let us leave the sybarite to his *far niente*, and return to Perkins at Hong-Kong.

Pei-ho, quite contrary to Ming, had passed a very good night. As Dr. Clifton had supposed, on his first examination, his cure was only a matter of a few days. That morning the learned operator affirmed to his friends that he had not been mistaken, for the only thing which he had to fear—the con-

"Exactly so. You see that our bargain with Roumi was not a bad affair for you. Now you have only to catch your man."

"By Buddha! that is true. Now I have to catch him!"

This observation fell like an icy shower-bath over his joyous exaltation.

"You are interested to obtain this result as well as I——"

"I should say so! As much, even more!"

"So you are going to use all your influence. Let us leave the doctor with his patient, and go to the dining-room. I will tell you what you must do." And taking the arm of his friend, Perkins led him into the adjoining room.

"You see, now, where we are," said the smuggler. "You know the murderer and his retreat. Now we only require an authorization from Prince Kong to seize the Ladrone Islands. We need no junks or soldiers: we can execute this campaign ourselves, and, I promise you, successfully. We will strike two blows with one stone. We will catch your criminal, and clean out this nest of pirates. Oh! you will be of the expedition?"

"Yes, of course," stammered Ming, not daring to refuse.

"Then you will set out to-morrow, at daybreak, with the rising tide. Have your boat towed by the steamer as far as Whampoa. You will then get to Canton early and see the viceroy the same day."

"Very well. There is no time to lose."

"Well, you had better take some repose, and I will pay a last visit to our patient. I shall not see you before you go in the morning, so good-bye. I will be at the factory in two or three days,—as soon as our pilot-to-be is well enough to set out."

"Oh! take care of that good Peï-ho! All this is most extraordinary! A man hung and still alive! This satanic butcher! this miserable assassin!—when I know his name, no one knows where he is hidden; and when I learn where he hides, it has to be in some inaccessible place! Ah! I am going to have a very bad night!"

Pressing the captain's hand, the unhappy President of the Criminal Court went sighing to the apartment assigned him for the night he was to spend at the villa.

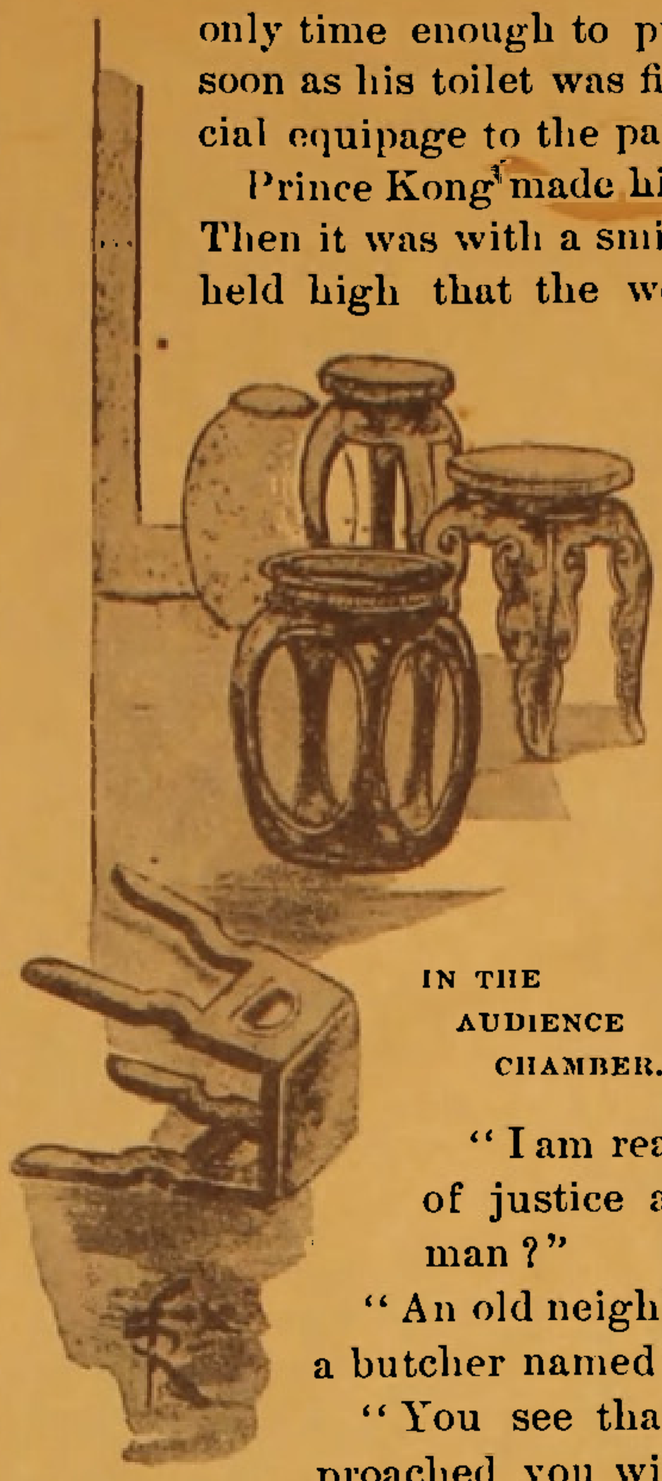
CHAPTER VIII.

Ming's Hopes Grow Brighter

LONG indeed the night seemed to poor Ming, who, as he had foreseen, slept very little because of his violent emotions of the evening; but nevertheless he did not wish to leave the villa without hearing from Peï-ho: he feared lest all the experience of the past few hours should prove to be a dream.

He went, therefore, the next morning, into the billiard-room, where he found the man who had been hung reposing in the most profound slumber, and Clifton, who was also sleeping. Then he went away, delighted to be reassured that he had not been the victim of a hallucination.

As he reached the port, the little steamer which served between Hong-Kong and Whampoa was about to depart, and he requested the captain to convey him to the latter port, which request was eagerly accorded, for the mandarin, notwithstanding the threatened one hundred blows of the bamboo, was none the less a great personage; and, thanks to this rapid means of transportation, he reached the island of Honan about three o'clock in the afternoon. There was only time enough to put on his best robe, and as soon as his toilet was finished he proceeded in official equipage to the palace of the viceroy.



IN THE AUDIENCE CHAMBER.

Prince Kong made him wait only a few moments. Then it was with a smile on his lips and his head held high that the worthy magistrate made his *entrée* into the audience-room where, only two weeks since, he had passed so miserable a quarter of an hour.

"Well, my dear president," the cousin of the Emperor asked him, "what news? Have you at last discovered the mysterious assassin of Ling-Ta-Lang?"

"Yes, sire," replied Ming, bowing down to the ground.

"I am really glad, both for the cause of justice and for you. Who is the man?"

"An old neighbor of Mrs. Liou's at Foun-si, a butcher named Tchou."

"You see that I was right when I reproached you with having failed to make the necessary inquiries and researches in this town. Has the miscreant been arrested?"

"Not yet, and his arrest will not be possible unless your highness will lend us your all-powerful aid."

"How so?"

"Because this Tchou, who disappeared more than two months before the marriage of Miss Liou, took refuge after his crime in the Ladrone Islands. Therefore I have no means of seizing him."

"In the Ladrone Islands?"

"Yes, sire. He has succeeded Peï-ho,—the pirate who was hung yesterday,—as commander of the order of the Water-Lily."

"This is valuable information. Who has given such exact details to you?"

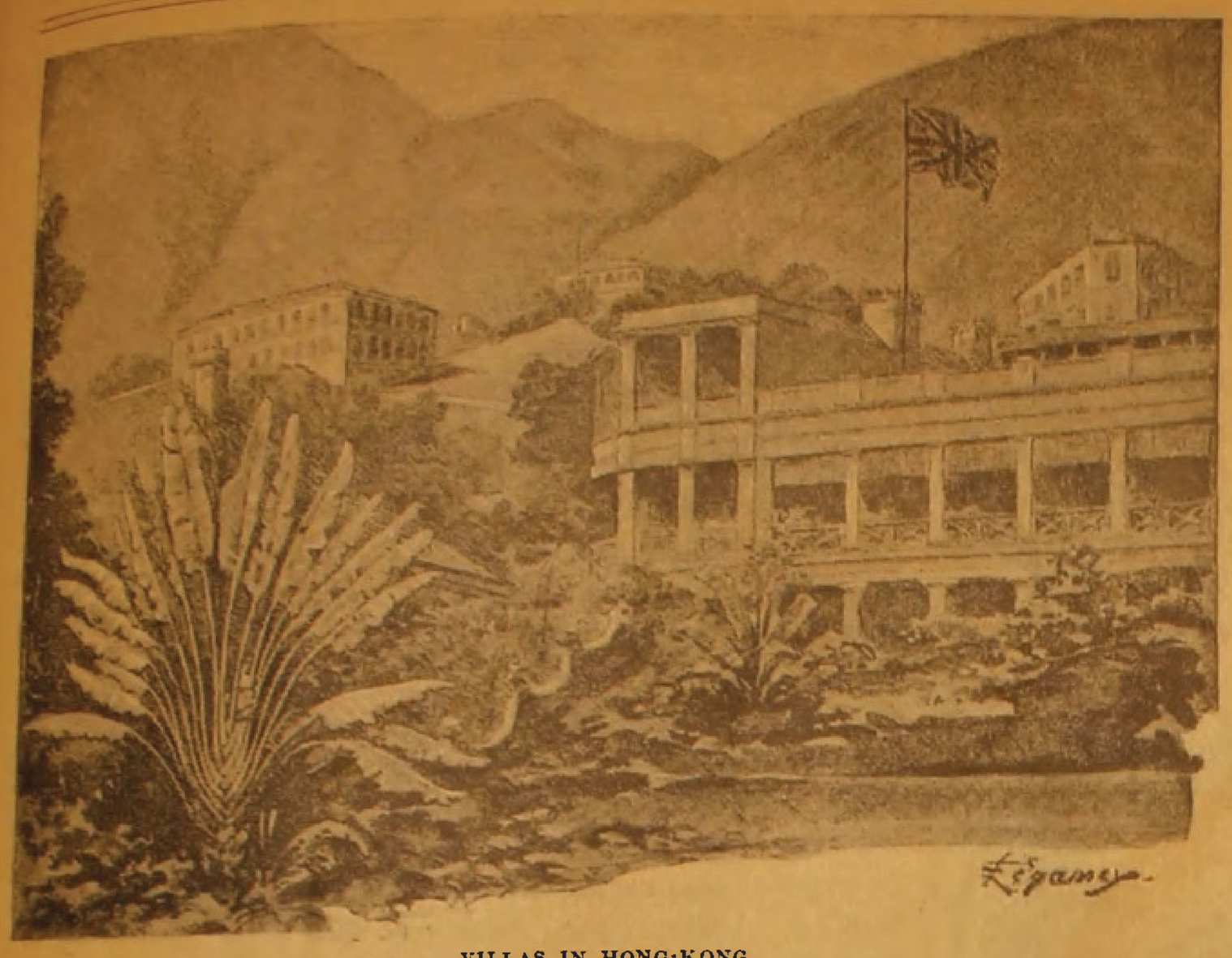
This question, which he hardly expected, caused Ming a certain emotion, for he did not know up to what point he ought to avow his relations with Perkins, an opium smuggler. However, he soon recovered himself and replied:

"I have thought that it was my duty to press the condemned up to the last moment, to learn the truth. To this end, I went to Victoria, I saw Peï-ho, and, under a threat of having him decapitated if he persisted in his silence, I induced him to reveal what I have just informed your highness."

THE GODS OF JUSTICE.

"That was very clever of you, and somewhat repairs your judiciary error; but I do not see exactly how it is that I can aid you to arrest this assassin."

"By authorizing me to make an attack upon the Ladrones with several war-junks."



VILLAS IN HONG-KONG.

demned not having succumbed to strangulation—was that the compression of the arteries and muscles of the neck might determine an internal lesion, and provoke cerebral disorders. Nothing of the sort was produced, however.

The most surprised of all was the man who had been hung. As soon as he awoke he looked about, then viewing himself in a glass he could not imagine that he was yet alive after having remained for half an hour at the end of a rope between heaven and earth, and he grasped existence again with an ardor never before known. From that moment his life became an object to him.

On the same day he gave Perkins all the details which he demanded regarding the Ladrone Islands and the organization of the White Water-Lily. He told the captain that the general headquarters of the pirates was at Wang-mu, and confirmed the promise that he had made him to lead the way there.

Assured of Peï-ho's assistance, the captain did not lose a moment. Leaving Peï-ho in care of Sir Arthur, he went to find the governor of the colony to tell him of the valuable information he had acquired, without, however, revealing its strange source. He also informed the governor that the viceroy would not oppose the expedition, and he offered himself and the "Lightning," to set out at once.

The officer, as we may easily understand, hastened to accept this offer, for the smuggler was noted as one of the best sailors in the country. Besides, his vessel was armed in a manner to make it a very respectable ship-of-war. He decided that he would get together, that evening, his officers on sea and shore, and as soon as he was officially informed of the good-will of Prince Kong, for he did not want to come into conflict with the Chinese authorities, matters would advance rapidly.

Enchanted with the result of his efforts, Perkins hastened to return to his villa, and resolved to go to Canton as soon as possible, in order to stimulate the zeal of Ming and arrange certain interesting matters with Mr. Lauters. He arranged with Sir Arthur, that the latter should at once return aboard the "Lightning," to put the schooner in shape to take part in the attack upon the Ladrones. He would find it at the anchorage of Lintin, upon returning to Canton. From there they would descend as far as Lintao, several miles from Hong-Kong, so as to be upon the route of the English ships which the governor would designate to exterminate the sea-rovers of Si-Kiang.

All this settled, the protector of Embroidered Willow decided not to separate from Peï-ho; and as the latter, seventy-two hours after his return to life, was doing marvelously well, he took him upon the same steamer which Ming had gone on two days before. On the same evening he arrived at the factory, where, after having installed the ex-pirate in his own apartment, he related to Mr. Lauters that which had occurred since he left.

(*To be continued.*)

SIGNS OF CHARACTER IN THE FACE:

HOW TO READ THEM.

II.

The Nose.

IT is now generally conceded that every faculty of the mind has its character sign in some portion of the face, and that the same laws are applicable to both men and animals. The nose being a very prominent and conspicuous feature as an indicator of depravity or of goodness and intellectual power, and having in consequence received marked and special consideration from both ancient and modern art scholars, it behooves us to recognize its significance, whether it points in the direction of purity, power, and nobility, or to weakness and imbecility.

A very large, finely proportioned nose always indicates great positiveness, perseverance, and force of character, excepting when the lymphatic temperament predominates: in such case brilliancy and force are lacking. If the nose is large and of the Grecian type (see Fig. 1), self-control, candor, dignity, frankness, and generosity will be leading characteristics, and the owner be endowed with excellent linguistic and conversational ability. If the nose is large and of the Roman type (Fig. 2), the owner will be very persistent, combative, austere, and domineering, and if cultured will delight in debate.

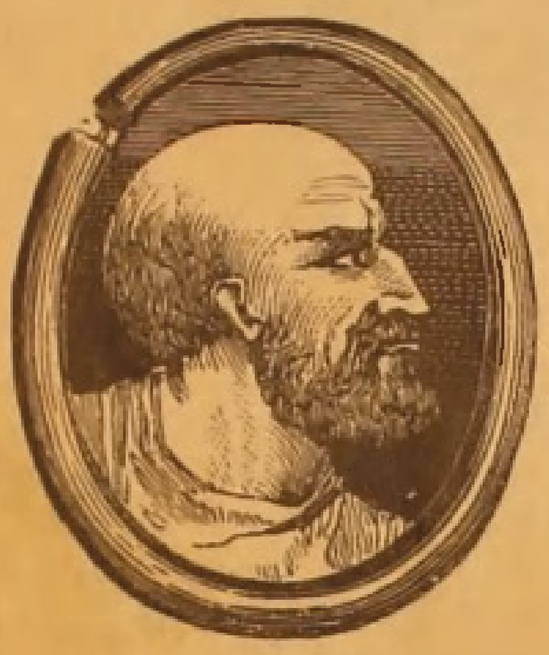
The Grecian nose generally accompanies the sanguine temperament, at least the finest specimens are found when that temperament predominates. The Roman nose, with

For types illustrated we are indebted to the Fowler & Wells Co., publishers of "New Physiognomy," and "Heads and Faces."

1. GRECIAN NOSE.

few exceptions, is associated with the dark variety of the bilious temperament. A small nose usually is a sure sign of moderate executive ability, lack of force, energy, and mental power. Sometimes small-nosed people are intellectually pert, and witty on moderate occasion, but they never become prominent as commanders, pioneers, or leaders in the march of civilization.

"An inch on a man's nose," says an eminent writer, "would be, in a majority of cases, a striking elongation; but the antique sculptors, when they had modeled the noblest and most symmetrical human face, full of strength and dignity, power, and majesty, the face of an ideal monarch or hero, had only to add a few lines to the length of the nose, and the face became that of a god." If there were any doubt whether a Greek statue were intended for a deity or a mortal, it could always be settled by measuring the nose. (Fig. 3.) The ancient artists gave the elongated Greco-Roman nose to Jupiter, Hercules, Minerva, and other deities. Plato designates it the "royal nose." The old masters, in their portraits of holy personages, always idealized the nose.



2. LUCRETIUS.

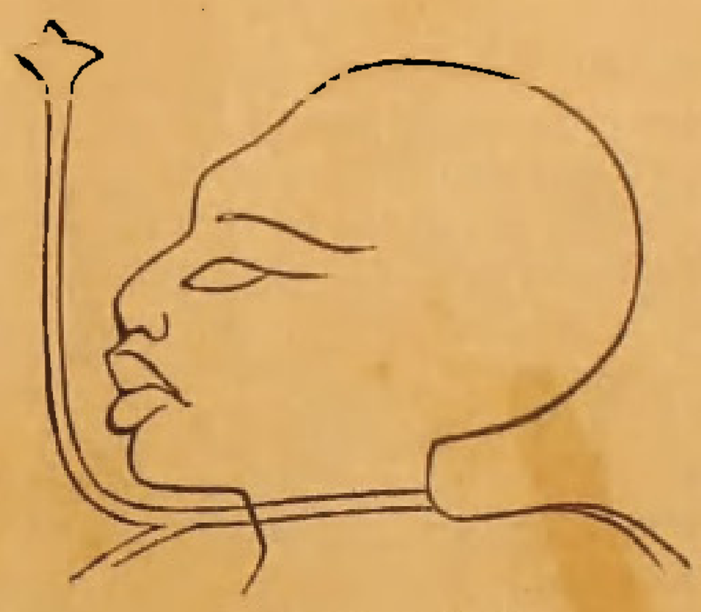
The wonderful accuracy of the ancient Egyptian sculptors in their representations of human beings, especially Hebrews and negroes, is remarkable: one might suppose that they were copied from modern photographs. The nose here, also, was indicative of caste. (See Figs. 4 and 5.)

3. APOLLO.

A large nose accompanying the lymphatic temperament is not a sure sign of intellectual greatness or physical power. This temperament has a peculiarly modifying influence, and when its sluggish tendency predominates in either sex, it develops much less force of character, persistence, and activity, even though the nose be large, than when the same size of nose is associated with either the sanguine or the bilious constitution. The lymphatic temperament being an abnormal condition, the result of an excess of lymph, it always lowers the standard of both mental and physical power, consequently the ability to resist disease. A prominently large or medium-sized nose, broad at the base, with thin, large nostrils, is an indication of powerful lungs, great vital tenacity, and long life. This idea is based upon the fact that life largely depends upon our breathing capacity. The nose is the natural and proper source through which we drink in nature's great re-invigorator, oxygenized air. This vitalizing element is the first and last want of our animal existence: our first sigh and last gasp attest its wonderful power.

The nose is not only a thing of beauty or ugliness, but a truthful indicator of character as well; yet, although the central feature around which many other character signs congregate, it is not quite such a "tell-tale" as either the eyes or mouth. Philosophers, poets, and sentimental rhymists agree that the eye and its appurtenances present a greater variety of expressions and other signs of character, yet none attract the attention more than a conspicuously formed nose. A clear conception of the importance of this useful organ as regards beauty may be gained from seeing a person who has unfortunately lost a portion of the nose: nothing so mars the beauty of the human face.

4. A GRECO-EGYPTIAN.



5. AN EGYPTIAN NEGRO.

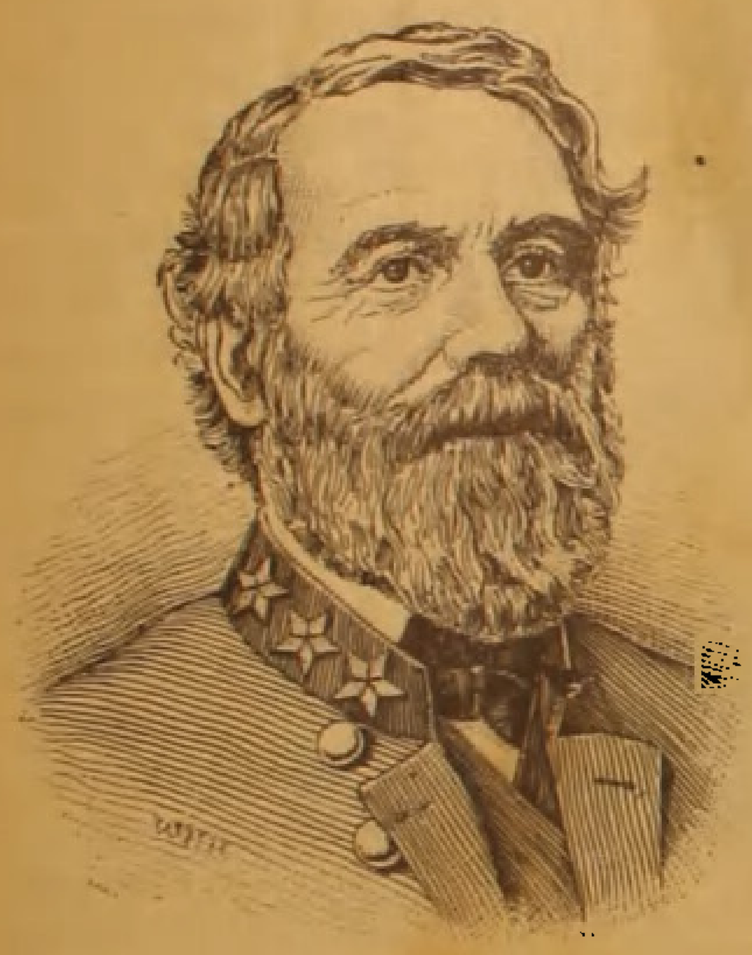
The slightest variation in shape, size, or length of the nose, always indicates a corresponding difference both in character and facial expression. It is an index feature: whichever way it may turn, upward, downward, or outward, it always points to something. The great arbiters, rulers, and molders of tribal and national events, discoverers, pioneers, and warriors, from the earliest times (judging from the records we have of the appearance of the ancient heroes) down to the present day, have either had noses of the Roman type, or a combination of the Grecian and Roman, with a large predominance of the latter. Generals Grant

6. GENERAL GRANT.

(Fig. 6), Sheridan (Fig. 7), Robert E. Lee (Fig. 8). Stonewall Jackson (Fig. 9) with a few other modern commanders noted for their intelligence and love for humanity, possessed noses which were a blending of the Roman and Grecian types, with a predominance of the latter. The Greco-Roman nose always indicates a higher order of manhood than the pure Roman.

7. GENERAL SHERIDAN.

The genuine Grecian nose indicates scholarly ability, refinement, originality, and fondness for art culture. Nearly all of the noted men and women who have been endowed with great scientific, artistic, literary, or musical genius, or the gift of statesmanship or oratory, have possessed the Grecian type of nose. Examples are found in Michel Angelo, Talleyrand, Franklin, Dr. Gall, Mrs. Hemans, Lucretia Mott, Swedenborg, Beethoven, Handel, Mendelssohn, Mrs. Browning, Bancroft, Garrison, Wendell Phillips, Cardinal Manning, "Christopher North" (Fig. 10), Elizabeth Ney (Fig. 11), Charles Sumner, and Harriet Beecher Stowe.



8. GENERAL ROBERT E. LEE.

The most beautiful and perfect specimen of the Grecian nose is about one-third of the length of the face, while the snub nose is only about one-quarter of the length of the face. The snub nose indicates narrowness, weakness of character, ignorance, and inertia. This is prevalent among the non-progressive and less advanced races, as the Chinese, Malays, and Hottentots, among whom the faces seem as though they were all cast in the same mold. This state of things may be accounted for on the ground of their clannishness and non-intercourse with the outside world.

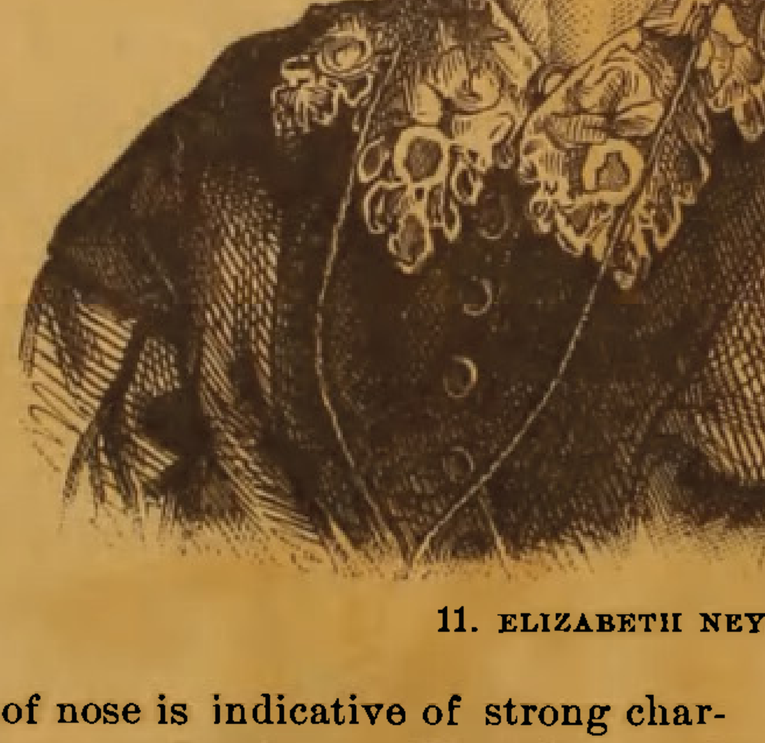
In cosmopolitan America we have a complex variety of noses, comprising every shape and size, from the finely chiseled Grecian to the most repulsive snub. The Hebrew, or Jewish, nose, modeled somewhat after the style of an eagle's beak, and known as the acquisitive, or money-getting, nose, is well represented in Fig. 13. The owner of this peculiar type of nose is stingy, speculative, and presumptuous, especially if uneducated, but is usually good-natured and industrious. This type is found in all of the great trading-centers of the world. A variety of this type

9. GENERAL "STONEWALL" JACKSON.

10. "CHRISTOPHER NORTH."

11. ELIZABETH NEY.

of nose is indicative of strong character and culture. The picture of the philanthropist Sir Moses Montefiore (Fig. 14) illustrates this. If traditional representations can be relied upon, the Saviour came from the blonde-sanguine type of the Jewish people, whose noses were of the Greco-Roman style.



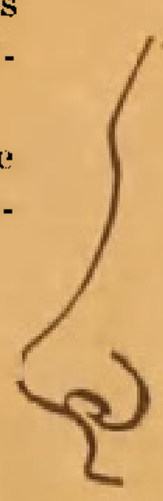
13. JEWISH NOSE. ACQUISITIVE.

12. A HOTTENTOT.

The exact converse

14. SIR MOSES MONTEFIORE.

of the aquiline is what is known as the "celestial" nose (Fig. 15). The owner of such a nose seldom possesses strength of character, is yielding and dependent, easily imposed upon, and quite inquisitive. Yet it often imparts a piquant effect to the face, and has many admirers.

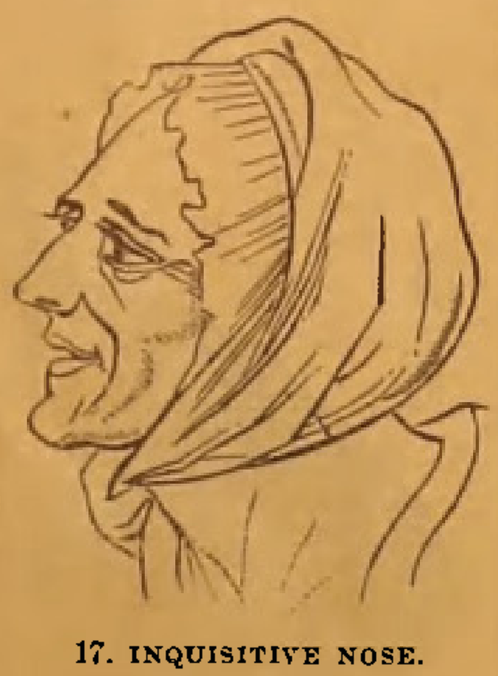


15. THE "CELESTIAL" NOSE.

Those unfortunates, of either sex, who have very long, thin, sharp noses, the point turning abruptly downward, yet not hooked (see Fig. 16), are naturally despondent, always borrowing trouble, have "the blues," and are liable to severe attacks of melancholia. Fig. 17 represents the "inquisitive" nose: a woman

16. MELANCHOLY NOSE.

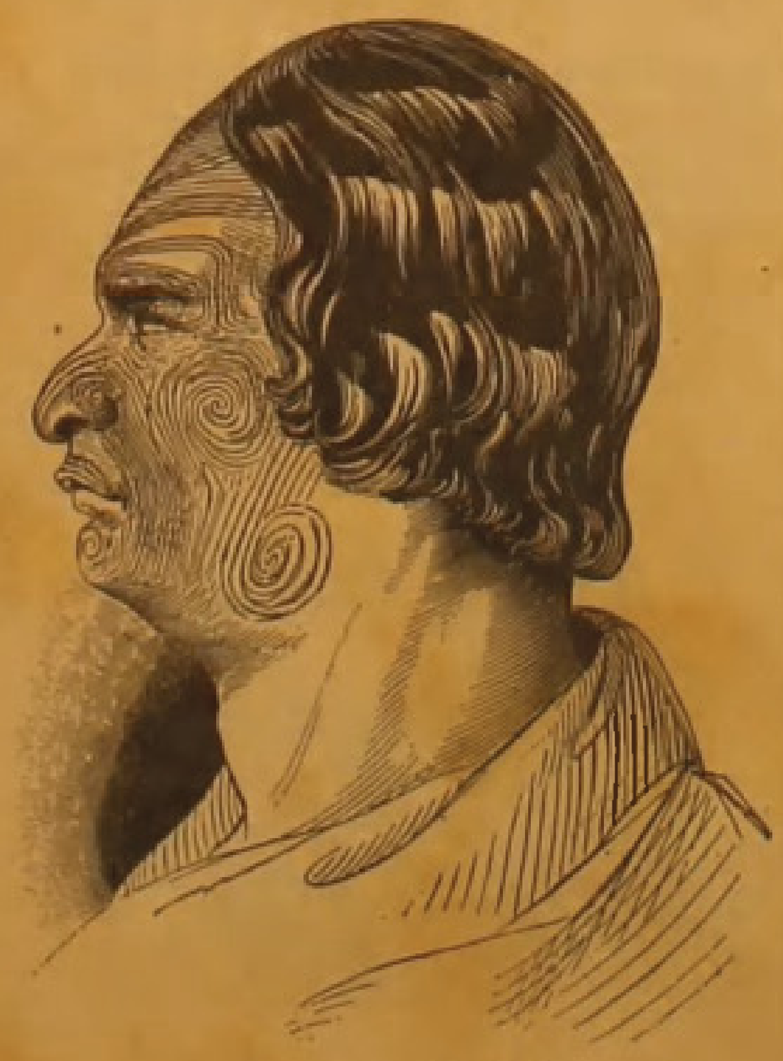
possessing such a nose is usually a gossip. Fig. 18 shows us the "irritable" nose: it is long and thin, with a prominence on the ridge, and a cut-off effect at the end. Persons with this type of nose are quick-tempered, fickle-minded, and quarrelsome, especially



17. INQUISITIVE NOSE.

18. IRRITABLE NOSE.

if narrow between the eyes. The large, broad-based, aquiline pug nose, shown by Fig. 19, indicates beastly sensuality, indolence, and brutality.



19. A NEW-ZEALANDER.

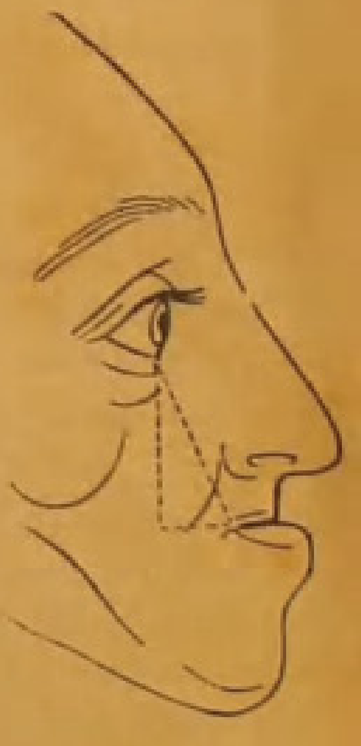
A very prominent, long, thin, and extremely sharp nose, if possessed by one in whom the bilious temperament predominates, indicates downright meanness and villainy. The picture of Charles Fleming (Fig. 20) illustrates such a nose. He was not only a cunning, hypocritical thief and liar, but his unrelenting cruelty almost exceeded belief. A similar type, with the addition of the elongated point, which indicates inquisitiveness, is shown in Fig. 21, the picture of the murderess Polly Bodine. Fig. 22 represents a type of nose the owner of which is always ignorant, despotic, and coarse. A nose like that represented by Fig. 23 indicates a weak mind. Persons with this type of nose are credulous, and easily deceived and influenced to do wrong. In the three last examples, the nose, chin, lips, and eyes are in perfect conformity with this general mental condition.

20. CHARLES FLEMING.

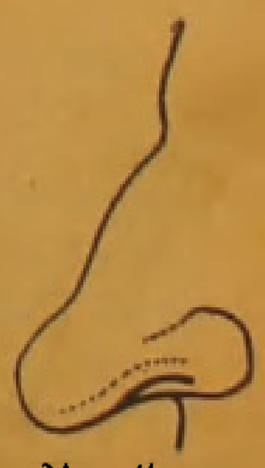
21. POLLY BODINE.

Our last nasal specimen (Fig. 24) is known as the "intemperate" nose (which becomes bottle-shaped in old age). It is very long, large, and coarsely formed, the end slightly flattened like the beak of a goose, and the nostrils are large and expanded, and there is a slight arch in the central portion of the ridge. Persons of either sex possessing this style of nose are fond of company, sociable, but rather inquisitive and apprehensive, also quite liable to become intemperate from their lack of ability to resist the temptation to indulge in liquor, and are sometimes addicted to the use of narcotics. This sort of nose is found among all classes, high and low, rich and poor. It is not a national type, but the result of a perverted appetite and passion for intoxicants. Were it not for reckless habits and debauchery, long life (barring accidents) would be inevitable; for persons having this kind of nose invariably possess strong constitutions, but are usually careless and indolent.

22. IGNORANT, DESPOTIC NOSE.



23. STUPID NOSE.



24. A "BOTTLE" NOSE.

In conclusion it may not be uninteresting

to state that modern civilization presents no distinctly national type of nose. For the direct origin of our wonderfully complex variety of noses, both in this country and Europe, we trace back to combinations of the ancient Goths, Greeks, and Romans. For a still more ancient and remote source, we go back 4,000 years B. C. to the Aryans, who were the common ancestors of the Greeks, Romans, and Hindoos, in fact of the entire white race.

PROF. EDWIN VERRES WRIGHT.

The Betrothal.

THE stars peeped forth with laughing eyes;
The happy moon looked down
From Night's great jeweled crown;
The breezes whispered to the trees;
The river told it to the seas;
The sea reached up and kissed the skies:
All Nature thrilled with glad surprise.

For once within this life of ours
We pass through Eden's perfumed bowers
The children of a banished race
Stand once within that holy place,
And sip its nectar, cull its flowers.
Hath even Paradise a bliss
More sweet than love's betrothal kiss?

ROSE HARTWICK THORPE.

Foes Afield.*

I.

PLANTS POISONOUS TO THE TOUCH.

SHAKESPEARE says that the most perfect blamelessness does not save one from calumny; and this truth holds, it seems, even in the vegetable world. Unjust suspicions attach to our most beautiful wild vine, though it looks quite unlike the poisonous clamberer with which it is confounded, and thus it avoids the very appearance of evil.

English ivy is honored by poets, who have written charming things in its praise; and our graceful American ivy, or Virginia creeper, is equally deserving of honorable mention. It is fertile in resources: it clings to the rock, if it can lay hold of one, with a number of stout little "suckers;" but if no rock or wall be near, the suckers turn into delicate tendrils which clasp boughs and twigs, and thus the vine adapts itself to any station in life, and makes the utmost of its opportunities. It covers the blank wall or gaunt dead tree with a living curtain, luxuriantly green all summer, and glowing at the touch of frost with a wealth of color which would put the most gorgeous tapestry to shame. Yet no poet writes a sonnet to this charming ivy of ours; the unbotanical public are inclined to shun it, and slander says that it is poisonous.

American ivy and poison ivy are not even akin, but belong to wholly distinct botanical families; for the Virginia creeper is first cousin to the grape, while poison ivy is closely related to the common sumach. The leaves of the American ivy are long and tapering, like lance-heads, and their edges are cut into points like the teeth of a saw. They grow in groups of FIVE, the leaves of each quintette clustering around the top of one long stalk, which is the common support of all. Botanists regard the whole cluster as one "compound leaf." They compare the five members of the group to the outspread fingers of a hand, and hence the compound leaves are called digitate, from the Latin *digitus*, a finger. From the same comparison the vine is sometimes called "Five-finger."

The very young leaves are coral red; those a little older are pink, and when the five small leaflets are only partially unfolded, they might suggest rosy, baby hands half-closed.

The Virginia creeper bears juicy, shining black berries, which grow in flat, spreading clusters on rosy stalks, and ripen in October. The vine is slender and clinging. Its main stem is seldom two inches in diameter, and its boughs are short, slender, and drooping. When it scales a tree it often throws out no boughs at all, but wraps itself about the trunk and limbs almost as tightly as their own bark. Sometimes a consumptive tree is smothered in this close embrace; and this is the worst misdeed ever committed by the Virginia creeper, which is not in the slightest degree poisonous, "any way you may take it."

Our real foe afield, the poison ivy (*Rhus Toxicodendron*), is, unhappily for us, exceedingly common everywhere,—on rocks, along stone walls, in fence corners, or clambering up tree-trunks in thickets and moist meadows. It only needs sunshine, and a little dampness at its roots. It puts out no tendrils, but clings to its support with a great number of short, woody threads, or "aerial rootlets." These sometimes grow from the trunk and larger branches in such numbers that they almost hide the bark, and give the limbs of the vine a mossy appearance.

The main stem of a mature plant is a sturdy affair, sometimes thicker than a man's wrist. It throws out vigorous, horizontal branches, and when the vine scales a tree its boughs are often as long as those of its host and victim. The leaves grow in groups of THREE. The middle leaf is raised on a stalk an inch or two above the point at which the pair of side leaves are joined to each other and to the long stem which upholds the whole trio. The leaves are oval, and each narrows to a slender point at the tip. When full grown, they are generally from four to six inches in length, and from three to five in breadth. They are thin, glossy on the upper surface, and somewhat downy on the under side. Their edges are sometimes rudely scalloped and notched, and sometimes irregularly cut into large, jagged points, but usually entirely plain and unadorned. The young foliage is highly lustrous, and of a deep purplish red color, not unlike that of raw beefsteak.

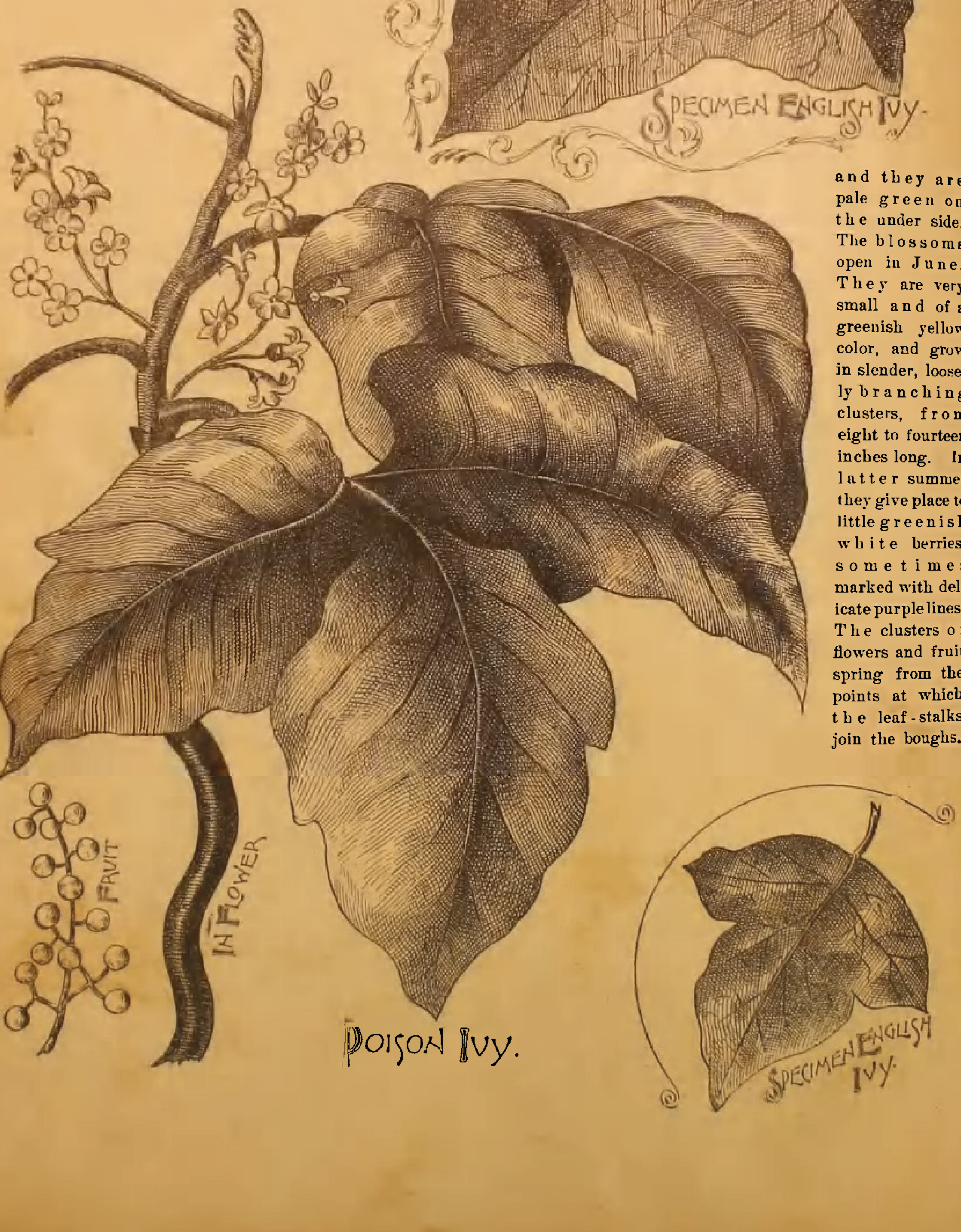
The flowers appear in latter May or early June. They are of a pale greenish yellow color, and they grow as grapes do, in long, drooping clusters. They exhale a delicate fragrance, like that of white clover, and receive much attention from flies and bees. On the vine we may see clusters of last year's fruit. These are dried up by winter winds, and are stony, silvery in color, and about as large as grains of barley. They made their debut, late last summer, as little, pale brown berries. Poison ivy is often simply and vaguely called "poison vine." In early youth it sometimes stands erect, like a shrub, and then it is known as "poison oak."

There is only one other native plant which we need shun. This is a near relation to poison ivy, the poison sumach (*Rhus Venenata*). It is a fine instance of the truth of the

* The second article on "Foes Afield" (which will be published in the July number) will treat of "Plants Poisonous to the Stomach," and will be much more fully illustrated than the present article, as there are so many more of the second variety. The clear descriptions and accurate illustrations make these papers especially valuable to those who contemplate a summer sojourn in the country and who are unfamiliar with the appearance of poisonous plants, particularly if there be children in the family, who can be easily taught from these to distinguish the poisonous from the non-poisonous varieties.

copy-book axiom, "appearances are deceittul;" for it is the most beautiful shrub of the swamps, and virulently poisonous. Poison sumach grows in marshy spots, often rooted in a pool of water. It is a compact bush, generally from eight to fifteen feet high, though occasionally it grows into a small tree from twenty to thirty feet in altitude. The wood is remarkably smooth, very brittle, and covered with satiny, ashen-gray bark. The main stem is from two to five inches in diameter.

The leaf stalks are of a beautiful rose purple color, deep yet vivid. Each bears nine small leaves, or "leaflets," one at the tip of the stalk, and the remaining eight ranged along its sides in pairs. Their upper surface is richly lustrous,



Poison Ivy.

and they are pale green on the under side. The blossoms open in June. They are very small and of a greenish yellow color, and grow in slender, loosely branching clusters, from eight to fourteen inches long. In latter summer they give place to little greenish white berries, sometimes marked with delicate purple lines. The clusters of flowers and fruit spring from the points at which the leaf-stalks join the boughs.

In general appearance poison sumach resembles its near relation, the "smoke plant" of the garden. With its shining bark, lustrous foliage, and rich red leaf-stalks, it looks like a stranger from the tropics, rather than an aboriginal of the soil. It may be found in any fresh-water swamp in the United States, from Canada to Louisiana. Like other bad characters it has more than one *alias*. Indeed, it bears a different name in almost every State of the Union, and is variously known as "poison wood," "poison ash," "poison elder," "poison alder," "swamp sumach," and "poison tree." In Massachusetts it is known as "dogwood," though that name really belongs to a tree of widely differing species, which bears large, conspicuous, white flowers.

There are four non-poisonous varieties of sumach. Three of these are very common everywhere. They differ widely from the poison sumach in their choice of residence, for they are found in dry, barren soil, on mountain slopes and stony hillsides. Their foliage takes on gorgeous and varied hues at the first touch of frost. The leaves may be gathered with impunity, and as they do not fade when pressed, they are the chief delight of the collector of autumn foliage. The blossoms of these hillside sumachs are green and pallid, like those of the scapegrace of the family, but they differ entirely from the poisonous flowers in their mode of growth. They are borne in upright, dense, compact, pyramidal clusters, and the fruits which follow them in latter summer are velvety and of a very rich and beautiful scarlet. They grow darker with age, so that the fruit-cluster often presents a lovely gradation of color, the older fruits at the base of the pyramid being deep garnet, while the young ones at its apex are the color of scarlet coral.

The fragrant sumach, a rarer non-poisonous variety, also grows in dry, rocky soil, so that any sumach found in swampy ground must be regarded as an enemy. The flowers of fragrant sumach are very small indeed, and they come out before the leaves unfold. They grow in close, slender spikes, like catkins, and the fruits which follow them are scarlet and velvety.

Thus the smooth whitish or dun-colored fruit is a distinguishing mark of the unworthy and disreputable members of the family *Rhus*.

Poison sumach is far more noxious than its clambering cousin, but it does less mischief, on the whole, as we are not so liable to meet with it. The virulent properties of both plants are most active when the sap is stirring and the leaves unfolding in spring. They are also especially to be shunned at flowering time.

People are more apt to be affected by the poison if they are exposed to its influences while in a state of perspiration. Some persons can gather flowers and foliage of both plants with impunity. Some can even rub, chew, and swallow the leaves of the poison sumach without subsequent unpleasantness. Others are badly poisoned even by the breath of the plants if it is brought to them by the breeze. Such susceptibility as this, however, must be quite exceptional, for poison ivy is very common along country roadsides, where people pass it frequently.

The *Rhus* cousins, doing their worst, cannot kill their victim; but they can make life a heavy burden for ten days or a fortnight. The trouble does not begin till several hours after exposure to the noxious influence of the plant. The symptoms of poisoning are swelling of the parts affected, or, in aggravated cases, swelling of the whole body. Sometimes the swelling is so great that the eyes are closed, the face shapeless, and the features almost obliterated, as in malignant small-pox.

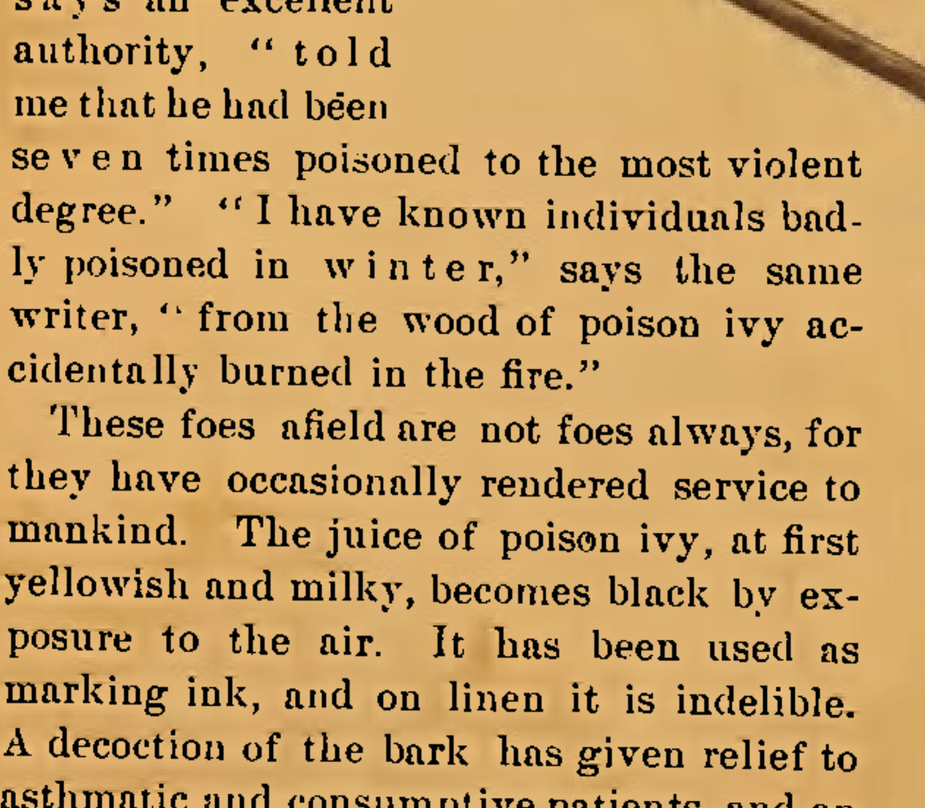
The skin becomes much inflamed, and itches and burns intolerably; and sometimes gatherings or blisters form. The distress reaches its height on the fourth or sixth day after

the luckless encounter with the *Rhus*, and then the skin peels off the inflamed parts, and the soreness and swelling gradually subside.

There is probably a remedy in nature for every physical ill, if we only knew where to find it. The antidote for ivy or sumach poisoning is sugar of lead, which may be bought from any apothecary, in the form of a dry powder. Explicit directions as to its use should be obtained at the same time. It is dissolved in water, and sometimes a little tincture of opium is added to the solution. Cloths are dipped into the liquid and then applied to the inflamed parts. Sugar of lead is itself a poison, and the two foes of mankind, *Rhus* poison and lead poison, fall to fighting each other, like the Kilkenny cats, till both are destroyed, —or at least rendered incapable of mischief.

Unhappily for those who are susceptible to the *Rhus* poison, it is not like the proverbial lightning which "never strikes twice in the same place." "A gentleman residing in the country," says an excellent authority, "told me that he had been seven times poisoned to the most violent degree." "I have known individuals badly poisoned in winter," says the same writer, "from the wood of poison ivy accidentally burned in the fire."

These foes afield are not foes always, for they have occasionally rendered service to mankind. The juice of poison ivy, at first yellowish and milky, becomes black by exposure to the air. It has been used as marking ink, and on linen it is indelible. A decoction of the bark has given relief to asthmatic and consumptive patients, and an infusion of the leaves has been used with success for the cure of paralysis. An extract of the plant has also been of great benefit to persons suffering from dyspepsia.



NON-POISONOUS SUMACH.

Poison sumach, too, may have its redeeming qualities; for it is believed to be identical with the *Rhus Vernicifera*, which yields the much admired black varnish of Japan.

Though not strictly poisonous, the nettle might be classed among our foes afield, as all will agree who have inadvertently come in contact with it. The genus *Urtica* (from *urere*, to burn) consists principally of herbaceous plants

supplied with stinging hairs, each terminating in an exceeding sharp, fragile point which breaks off after entering the skin, allowing an irritating juice, contained in a bulb at the base, to flow into the wound. If the plant be grasped roughly, these points are broken before entering the skin, and little or no inconvenience results: hence the value of the advice to grasp a nettle firmly. The small nettle (*Urtica urens*) is familiar to all, and is found near dwellings. It usually grows from eight to twelve inches high, and has comparatively few stings. The common nettle (*Urtica dioica*) is more liberally endowed with stings, so much so that it has been quaintly said "it may be found by feeling on the darkest night." It grows from two to three feet high.

SMALL NETTLE.

Several common wild-plants produce berries, or secrete juices which would play the very mischief with us if they were taken into the stomach. Hence little ones should be earnestly cautioned against the common childish habit of munching unknown leaves, stems, and berries, gathered out of doors. But poison ivy and poison sumach are the only plants, among all the green inhabitants of wood and field, to be avoided on account of being really poisonous to the touch; and these are so easily recognized that we can all learn to know and shun them, and thus enjoy our summer rambles with quiet minds.

E. M. HARDINGE.

HEALTH, GRACE, BEAUTY.

DELSARTE PHILOSOPHY MADE PRACTICAL.

II.

HEALTH! When shall we learn that grace and beauty are not desirable without health? In the April number I gave a system of exercises whereby one could obtain and preserve health. If one has not the time, or, rather, the inclination, to *earn* the needed force, I purpose herewith to acquaint him with a method whereby he may, in a certain degree, *save* force.

GRACE! There are three essential elements in grace: precision, harmony, and ease. To possess these I will give a system of exercises, the careful practice of which will produce the desired results. You may be precise in your movements, yet lack ease; you may be easy, yet lack precision; you may have both ease and precision, yet lack grace in proportion as you lack harmony. There should be a perfect relation: unrelated things are never beautiful. The handsomest furniture is not attractive in a moving wagon; you may be dressed in the latest fashion, yet invite ridicule; you may be dressed in direct violation of fashion's decree, and command admiration. It resolves itself into one question,—Is it becoming? If becoming, rest assured it is in perfect harmony with the individual mannerisms and surroundings.

BEAUTY! True beauty is dependent on both health and grace. Viewed from this standpoint, handsome men and women are rare. Beauty of face and form is largely dependent on one's self. A pure character is one of the constituents. Young womanhood is beautiful in a soft, dreamy, day-dawn loveliness, but a woman never reaches her real beauty until body, mind, and soul have been developed with touches of thought, feeling, love, care, and grand resolve. The youth, just fledged as a professional man, must wait years until the lines of experience, close thought, professional conflicts, business excitement, hopes blasted and hopes realized, have chiseled a few lines in his face, and imparted the brilliancy of sobriety to his eye; then, if pure, he is beautiful.

Beautiful and handsome men and women should be emulated, but *pretty* men and women are not worthy of such honor. Meeting a merely pretty man or woman is equivalent to meeting a suit of clothes of the latest fashion without anything in it.

We want solidity, and we must have it in its triune state, mentally, morally, vitally, ere we can have perfect manhood and womanhood.

POISE is essential. Harmonic poise teaches how to move with the greatest economy of force, how to walk, stand, sit, kneel, and bow gracefully.

"But," the practical business man says, "I know how to stand or walk when necessary, how to sit when I am tired, how to kneel when I desire, and how to bow to a customer. These things are intended for the society man or woman."

Not so: at least not wholly so. As I purpose dealing with the Delsarte philosophy in a practical manner, for practical uses by practical men, it is not within the province of this paper to enter the realm of sitting, kneeling, and bowing, as taught in all its minutiæ for the society woman; nevertheless, what suggestions will be given are of value to all, and may create a desire to carry the work to its fullest extent, in the event of which I would suggest the seeking of one of the many teachers who devote themselves almost exclusively to this branch of the work.

1. INHARMONIC POISE.

Let us come at once to the quick and the heart of the matter, by first teaching one how to stand. Not only is it an accomplishment to stand well, but it is a promoter of health, grace, and beauty. Backaches, pelvic troubles, dyspepsia, and many other ailments are the result of incorrect and ungainly positions in standing.

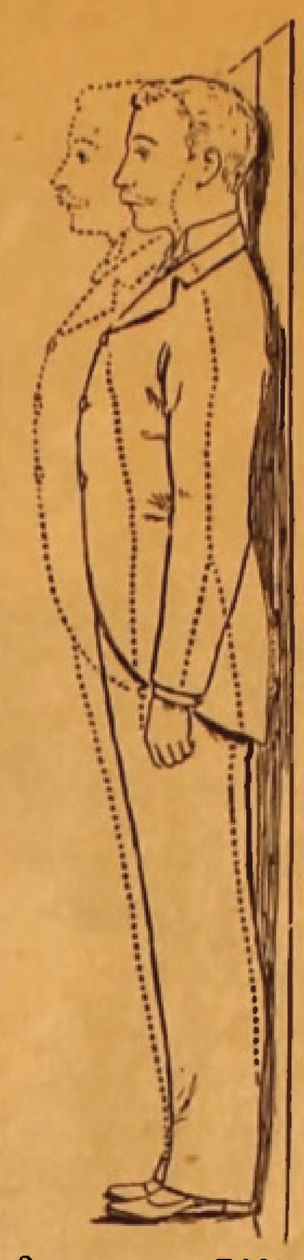
I will first speak of the position when the weight of the body is borne equally by both feet. The tendency is to cast the weight of the body heavily over the heels: in so doing, the abdomen is thrown too far forward, the curvature of the spine is greatly increased, the chest sinks, the breathing becomes labored, the back begins to ache, the abdomen assumes an ungainly appearance, the stomach and liver cease to perform their functions with the necessary precision, harmony, and ease. (Fig. 1.)

This inharmonic poise is overcome by transferring the weight of the body from the heel to the centre of the foot, drawing back the knees and the abdomen, and having the chest active, *i. e.*, raised and fixed, but this position of the chest must be obtained independently of the breath. The main weight of the body should not be either upon the heel or the ball of the foot, but midway. As a test of correct position, you should so stand that you can rise slowly on the toes without swaying the body either forward or backward. (Fig. 2.)

2. HARMONIC POISE.

There are various ways of obtaining correct position, and I herewith give one that may be readily taken.

CORRECT POSITION. Stand against the wall or door, first touching the heels, then the calves of the legs, and as much of the body as possible, touching the shoulders and the head. Do not bend the head back, but draw in the chin. Imagine an inflexible stick passing through the body from the head to the ankle,—not through it. Sway from the door without bending the stick: there will be no movement of any joint save the ankle. This will bring correct position, or harmonic poise. (Fig. 3.)



3. CORRECT POSITION.

POISING. I would also suggest the practice of poising by standing erect with the weight of the body as in correct position (Fig. 3), then swaying slowly backward without raising the ball of the foot from the floor and without bracing, *i. e.*, changing the curvature of the spinal column from that of correct position. Then sway to position, halting at correct position. Then sway forward as far as possible without bending the body at the waist, and without raising the heels. (Fig. 4.) In the swaying backward and forward observe the caution in reference to the stick extending through the body to the ankle, and do not bend any portion of the body that would cause the stick to break.

4. POISING.

UNGAINLY POSITIONS. If you desire the weight of the body on one foot, avoid placing the free foot—the one not bearing the weight—too far forward. It should be placed but slightly in advance of the other. When placed at too great distance (a prevalent fault) the tendency is to so settle on the strong leg that the hip joint seems to move inward instead of outward, thus causing the shoulders to become uneven. (Fig. 5.)

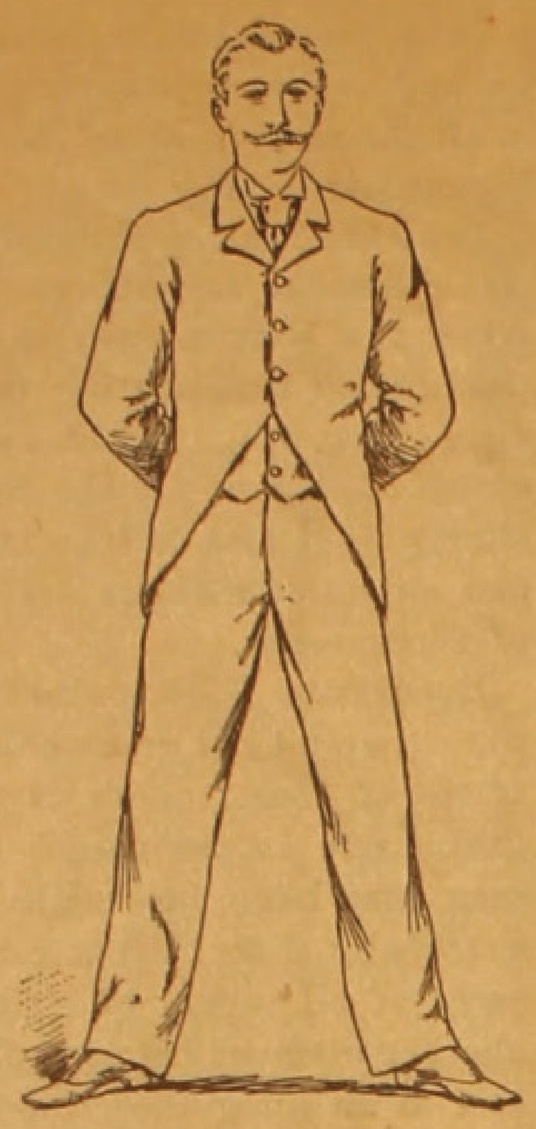
5. INCORRECT POSITION.

THE HIPS. To overcome or to avoid the habit of the incorrect movement of the hips, keep the feet nearer together. Allow the hip joint to move outward as you settle on the strong leg, and see that the shoulders are kept even. (Fig. 6.) Stand before a mirror, placing your hands upon your hips, and alternately settle the weight of the body on either foot.

6. CORRECT POSITION.

FAMILIAR REPOSE. Upon those who stand at the sacred desk, on the rostrum, in the drawing-room, or even upon the street, I cannot impress too strongly the language of the feet. I refer especially to the separation of the feet in what Delsarte terms "the widths." This position seems to have originated,

with the better class of men, in college, during familiar and easy chats; with the lower class of men, while in conversation around the bar or on street corners. In the one case it may be termed "Familiar Repose," in the other, "Vulgarity;" but by whomsoever taken and under whatsoever circumstances, it has a suggestion of the vulgar, hence should be studiously avoided by everyone moving in refined society. Be ever on your guard, for if careless when alone, you are not apt to be careful in the presence of others: habit so soon asserts itself. If you form a habit, let it be a good one. Impress everyone with the grandeur of your character. Impress yourself first. If you practice a dignified bearing its continuance will result in a dignified feeling, for it will be reflex in its action.



7. FAMILIAR REPOSE.

Man is a radiation from the finite to the infinite: the more perfect the radiation, the more perfect the man. A man who before an audience assumes—consciously or unconsciously—the position of "Familiar Repose" (Fig. 7) weakens his power in whatever line of thought he presents, unless it be in the portrayal of a rough, uncouth, unrefined character, in which case it is in keeping.

WALKING. A man's walk is, in a great degree, indicative of his character. Delsarte taught that the chest, the seat of honor, should lead; the feet, performing the most menial service and being nearest the earth, should follow. When you get correct position by standing against the wall and swaying therefrom by only the ankle movement, you will find it quite easy to walk very lightly if you keep the chest active. Carry your heart high. Be unconscious of your legs other than as a support.

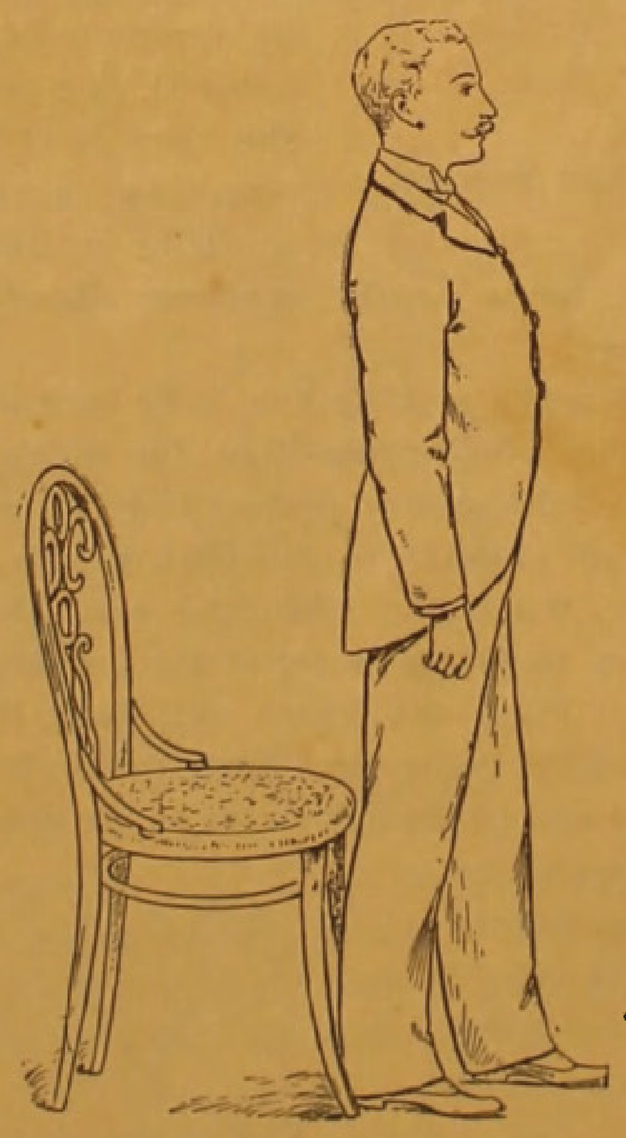
Avoid settling the body and allowing the abdomen to lead. A person walking in such a way is led by his appetites: he walks heavily and pays due deference to the earth for his physical support. Walk in the straight and narrow path, but do not let it be so narrow as to cramp your individuality. Be free. Be well balanced. The greater your vital development, the better if the other faculties are proportionately developed.

Do not allow your head to lead, especially with the face upturned. It shows one led by curiosity, a prying disposition. The nose is apt to be affected thereby. It is a good sign to have a large nose: it shows that the owner keeps it out of other people's business and gives it a chance to grow. The nose is a great indicator of character: we have the Roman nose, the Grecian nose, the Turkish nose, the aquiline nose, the inquisitive nose, and the nose that is so red that it leaves no room to doubt that "coming events cast their shadows before."

When the wag and the man of deep thought were passing a wheat-field ripe unto the harvest, the wag said, "Why don't you carry your head high, as I do?" The thoughtful man replied, "See yon field of wheat? The heads that are well filled drop forward." Other things being equal, the bowed head is a thoughtful one; but the walk will readily indicate whether it is bowed with grief, shame, old age, or deep meditation. The phrenologist tells you that the egotistical man carries his head high. Delsarte teaches us that the man of robust physique carries his head high. There is an indescribable something in the walk which will at once decide to which class he belongs. He may be classed under both; if not, his bearing will indicate to which he properly belongs. Attitudes are but temporary: bearing is habitual.

There are many representatives of this philosophy who teach that, in walking, the ball of the foot should first touch the ground. Delsarte did not so teach it, nature does not so teach it. Delsarte and nature are always in accord: Delsarte claimed that the ball of the foot would first strike the ground *if* the foot were restored to the proper proportions of nature, *i. e.*, the bare foot; but Dame Fashion has decreed a heel on the shoe, a heel much out of the proportion, and, in the case of the French heel, far out of the place of that designed by nature; hence, when you are walking correctly, the heel of your shoe (if not high) will touch simultaneously with the ball of the foot.

GOING UP AND DOWN STAIRS is a blessing, but it is rarely considered as such. A curse is but a blessing perverted. Every evil is perverted good. There is a right and a wrong way to ascend and descend the stairs. For economy of force, for gracefulness, and health, the heel should not touch the step either in the going up or coming down. In ascending, place the ball of the foot lightly on the step; slightly incline the body forward, but do not break it at the waist,—still feel that you are lifting the body by the action of the chest instead of allowing it to settle; allow the knees to remain bent in order to get the required elasticity; for the sake of your lungs and the strengthening of your vocal organs, keep your mouth shut, not only when ascending, but afterward, until the breathing is again normal. As you descend, the body should be erect, a slight giving at the knee, the ball of the foot touching almost noiselessly. The stepping should be so light that not the slightest jar is given to the body.



8. CORRECT POSITION BEFORE SITTING.

SITTING is easy,—sometimes too easy to be graceful. One should not drop on a chair as if he had no means of support after inclining the body. You cannot sit down gracefully if the feet are close together. Place one foot—say the right—near the chair, bend the knee of the leg nearest the chair, and as you sink to the chair incline the body forward. (Fig. 8.) In rising it is not necessary to touch the chair with your hands or place your hands on your knees to assist you: observe the same position of the feet as before sitting, and incline your body forward, throwing the weight of the body at once on the foot nearest the chair. It is also more graceful while sitting to have one foot nearer the chair.

BOWING is an accomplishment. It is not my purpose to speak of the court bow, the dancer's bow, the society bow, the Delsartean street-bow, or any other than the bow which is practical and fully courteous for every occasion in practical everyday life. I refer to the dignified bow, the bow only with the head. The head represents the mental element;

9. FOR FREEDOM OF THE WAIST MUSCLES.

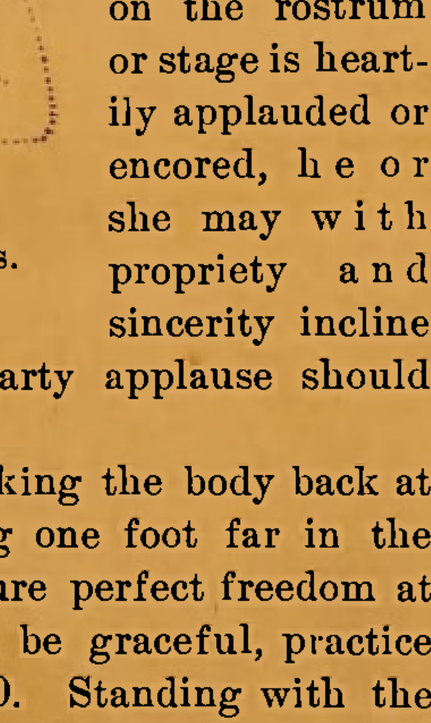
the trunk, or *torso*, the emotive element. As the mental is of itself cold, and the emotive is warm, the bow of the head alone is considered by society as too cold and too dignified (all dignity is more or less cold in proportion as it shows reserve); hence society calls for the bow from the waist, as such a bow shows more warmth, more of the heart. But as general society is heartless, the bow is deceptive; also, the yielding at the waist signifies "your humble servant," and if the upper eyelid droops it is humbleness *plus* humiliation,—a position rarely taken by a practical person if wholly sincere. When a man or woman on the rostrum or stage is heartily applauded or encored, he or she may with propriety and sincerity incline the body from the waist, for a hearty applause should bring forth a hearty response.

10. FOR FREEDOM OF THE WAIST MUSCLES.

This may be gracefully done by sinking the body back at the waist without necessarily placing one foot far in the rear and bending the knee. To secure perfect freedom at the waist, without which one cannot be graceful, practice as indicated in illustrations 9 and 10. Standing with the weight equally on both feet, bend the body as far forward and backward as possible. Push the knees well back in going forward, and bend them in going backward. (Fig. 9.)

Send the body to the right and to the left as far as possible without raising either foot from the floor. (Fig. 10.) Make the movement a stretching one, always avoiding jerkiness. Also twist the body right and left, keeping the feet firmly fixed.

The bow of the head, however, is always courteous, always true, and with a little practice can always be made gracefully. Jerkiness should be avoided; hence all the muscles of the neck should be pliable, yet strong. To gain this pliability and strength I would suggest a slow exercise as shown in illustrations 11 and 12.



11. FOR FREEDOM OF THE NECK MUSCLES.

Drop the head forward and backward, as slowly as possible and as low as possible. Keep the body firm, but easy, in all the movements of the neck. Avoid jerkiness. Stretch the muscles. (Fig. 11.)

Drop the head to the right and to the left as far as possible. Do not allow the body to sway or bend, or the head to turn during this exercise. (Fig. 12.) Take a special exercise of turning the head very slowly right and left as far as you can stretch it without straining any of the muscles.

12. FOR FREEDOM OF THE NECK MUSCLES.

STOOPING. How awkwardly people stoop! If awkwardness is a waste of force, there is much of that waste in stooping. A society man may have just made a bow so gracefully that he has excited the envy of all lovers of grace, but in another moment he may place himself in an altogether different light as he stoops to pick up a handkerchief, fan, or glove, dropped by his companion. After almost losing his balance he rises from his awkward position with flushed face,—flushed in consequence of the undue expenditure of force in his awkwardness, also because of his consciousness of that fact.

13. AWKWARD STOOPING.

This waste of force is very easily overcome. The awkwardness and flushed condition is due to the strain brought on the body by bending to the floor when the feet are too near each other: the more the body is allowed to sink by the bending of the knees, the easier will be the stooping, but it will still appear awkward.

Practice gracefulness in stooping (precision, harmony, and ease,) by dropping a handkerchief on the floor, then taking the position as shown in illustration 14, by lifting one foot easily from the floor and placing it back, at the same time bending the knee of the strong leg (the leg which bears the support of the body). The body will slightly incline forward, and the hand will drop gracefully to the object.

14. GRACEFUL STOOPING.

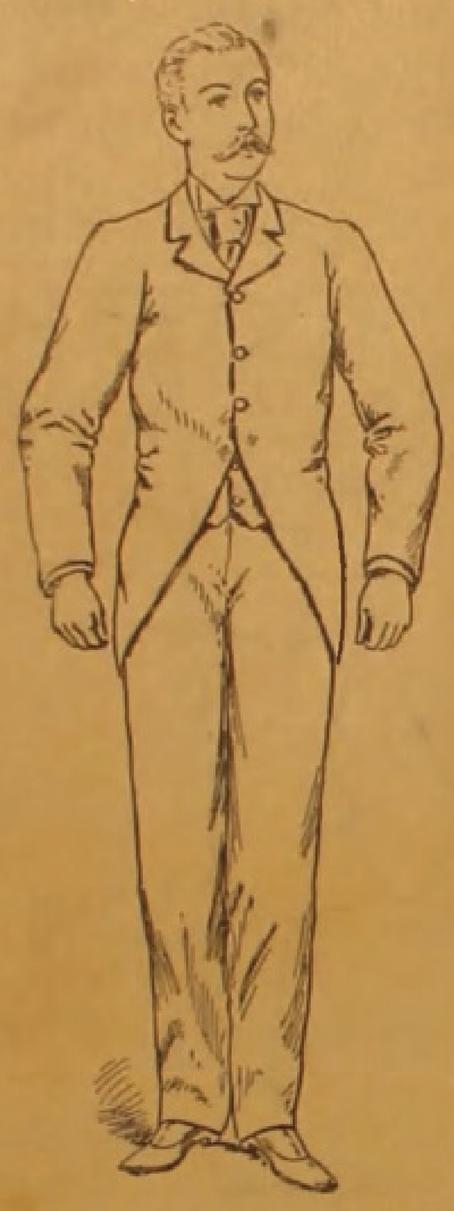
You can instantly gauge your distance, and the eye should perceive the object without dropping the head. Be careful when placing the foot back to turn it on the side, not on the toes.

KNEELING. Dropping on both knees is allowable under

15. KNEELING.

certain conditions. It is generally done if one has a cushion upon which to kneel; but this privilege is seldom accorded a person on the rostrum, the stage, or in the drawing-room.

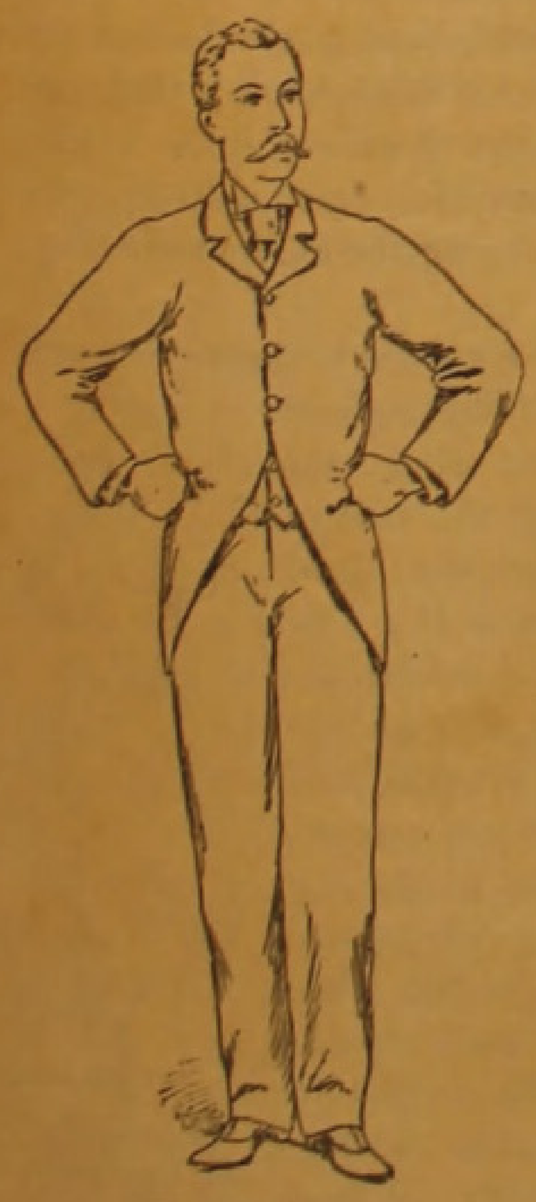
To kneel gracefully and with economy of force, one should, if not wishing to advance from his position, slowly pass the free foot back, dropping gently on the knee of the leg not bearing the weight of the body. When standing in position, the weight of the body on both feet, it is very easy to settle the weight on either foot, allowing the other perfect freedom, so as to pass it back, thus permitting you to drop on either knee. But if you are advancing toward the individual to whom you intend to kneel, you should not bring the feet together, but halting a moment, well poised on the advance foot, raise the free foot slightly, and pass it slowly back to the required position for sinking easily on the knee that is back. (Fig. 15.)



16. SELF-CONSCIOUS.

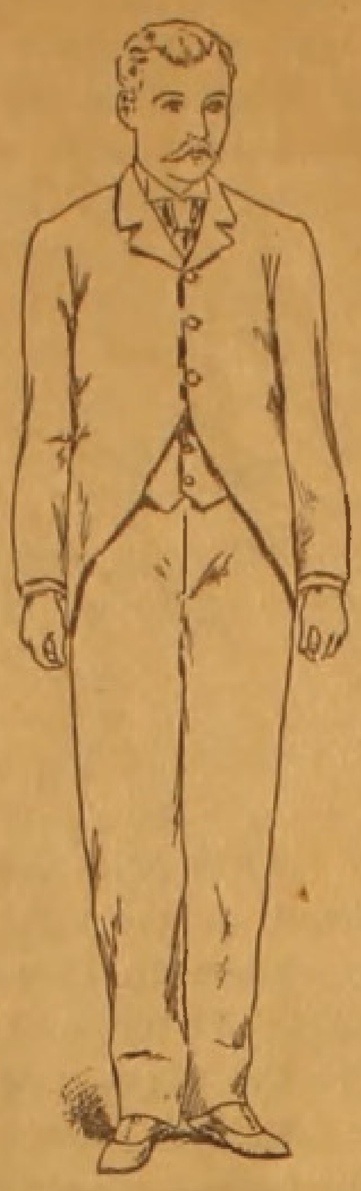
THE ELBOWS are great indicators of character: the arm is the type of the whole man. Show me how a man uses his arms, and I will at once tell you his general characteristics,—what part of his threefold nature is the most strongly developed. The hand and wrist are mental; the fore-arm and elbow are emotive; the upper-arm and shoulder are vital.

The elbows carried outward (Fig. 16) show a person to be self-conscious: it may be his awkwardness, his power in certain directions, his pride of certain achievements, his egotism of personal appearance. The hands may be carried so high as to be placed on the hips, the arms akimbo. This signifies still greater self-assurance, and if the backs of the hands are placed on the hips, it becomes *braggadocio*. (Fig. 17.) The elbows carried too near the body, perceptibly drawn in (Fig. 18), also indicates self-consciousness, but its significance is timidity, bashfulness, humility, nervousness, a general lack of self-confidence.



17. BRAGGADOCIO.

As awkwardness is due to rigidity, grace is due to its removal. Having already given illustrations for the practice of movements for the waist and neck, I will give those for the fingers, wrists, elbows, shoulders, hips, knees, and ankles. Rigidity is due to stiffness of joints or too strongly contracted muscles. When seeking the freedom of any joint, the flow of vital force must be arrested at that joint,—the knuckles, wrist, elbow, shoulder, neck, hip, knee, or ankle.



18. TIMIDITY.

It should be borne in mind, however, that any amount of practice to remove rigidity from any portion of the body will not of itself make one less timid, less self-assured, or give less of the spirit of *braggadocio*, only in proportion as the current of thought is changed at the fountain-head whence flows the stream through the channels of expression which by these practices become free from any obstacles that would otherwise obstruct them; nevertheless, all removal of rigidity by the exercises herewith given will make one less awkward in bowing, sitting, kneeling, walking, stooping, and in all things that result from lack of bodily control, and are not the result of mental emanations.

19. FINGER EXERCISE, FOR FREEDOM OF THE HANDS.

FOR FREEDOM OF THE HANDS, place the arms as shown in illustration 19. Put sufficient force in the fore-arms and hands to separate the fingers while thrusting the hands up and down. Take the life so completely out of the fingers as to remove all rigidity therefrom. Then place the arms as shown in illustration 20, and put sufficient force in the fore-arms to thrust the hands from side to side. Arrest the vitality at the wrist.

20. FINGER EXERCISE, FOR FREEDOM OF THE HANDS.

FOR FREEDOM OF THE ARMS, place the arms as shown in illustration 21. Put sufficient force in the fore-arms to thrust the hands up and down, and arrest the vitality at the wrist. Then place the arms as shown in illustration 22, and put sufficient force in the fore-arms to whirl the hands inward. Imagine the hands lifeless,—as if they were tied to the wrists. Arrest the vitality at the wrists. Again, place the arms as shown in illustration 23, and put sufficient force in the fore-arms to whirl the hands outward. Arrest the vitality at the wrists. Imagine the hands lifeless,—as if tied to the wrists.

21. WRIST EXERCISE, FOR FREEDOM OF THE ARMS.

22. WRIST EXERCISE, FOR FREEDOM OF THE ARMS.

strength in the right upper-arm, moving it backward and forward. Arrest the vitality at the elbow. The fore-arm and hand should hang lifeless, as if tied to the elbow.

FOR ELBOW EXERCISE, place the left hand to the left side, and raise the right arm as shown in illustration 24. Bend the body to the left. Put the

23. REVERSE OF FIG. 22.

right hand to the right side, as shown in illustration 25. Bend the body to the right, and put the strength in the left upper-arm, moving it backward and forward. Arrest the vitality at the elbow. The fore-arm and

24. ELBOW EXERCISE, FOR FREEDOM OF THE ARMS.

hand should hang lifeless, as if tied to the elbow.

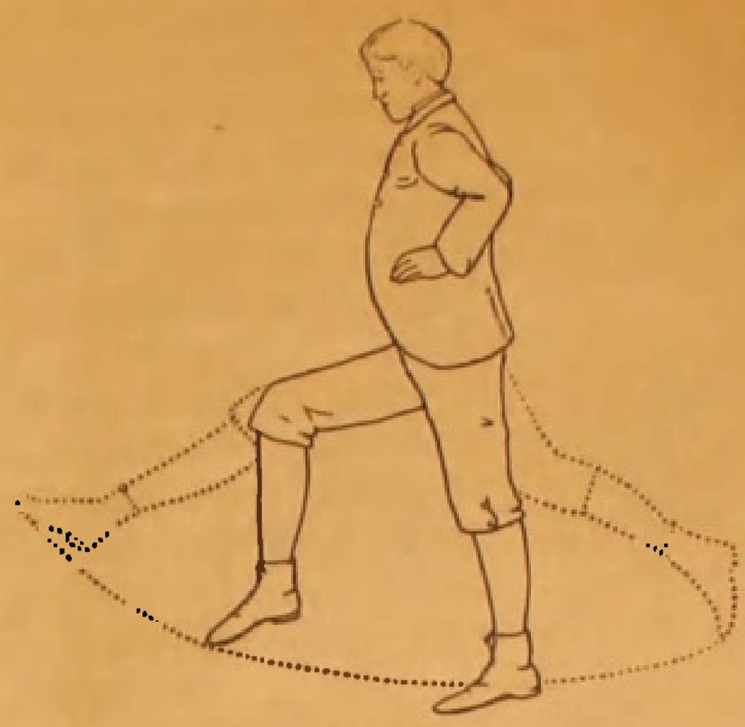
25. REVERSE OF FIG. 24.

FOR SHOULDER EXERCISE, put sufficient strength in the chest and shoulders to twist the body quickly, by one impulse, to the left (Fig. 26). Take the life out of both arms, arresting the vitality at the shoulders. Allow both arms to sway freely, but bring the body back to position. Do not repeat the impulse till the arms have ceased swaying. Then put sufficient strength in the chest and shoulders to twist the body quickly, by one impulse, to the right (Fig. 27). Take the life out of both arms, arresting the vitality at the shoulders. Allow both arms to sway freely, but bring the body back to position. Do not repeat the impulse till the arms have ceased swaying.

26. SHOULDER EXERCISE, FOR FREEDOM OF THE ARMS.

27. REVERSE OF FIG. 26.

Exercises have been given under head: bowing for the pliability of the neck muscles, and under waist-bowing for the pliability of the waist muscles; hence I shall take the exercises of the leg joints next in order.



28. HIP EXERCISE, FOR FREEDOM OF THE LEGS.

29. REVERSE OF FIG. 28.

One of the essential exercises for acquiring a graceful walk is the freedom of the legs in their movement at the hips. Outside of running or pulley-weights for the legs, there is no exercise that will produce such beneficial results as that of "pawing."

Stand erect with the weight of the body on the left foot. Raise the right knee as high as possible, and push the right foot forward till the leg straightens; then drop the foot to the floor and draw it back as far as possible, again lifting the knee and carrying the leg forward (Fig. 28).

30. KNEE EXERCISE, FOR FREEDOM OF THE LEGS.

31. REVERSE OF FIG. 30.

Now stand erect with the weight of the body on the right foot. Raise the left knee as high as possible, and push the foot forward till the leg straightens; then drop the foot to the floor and draw it back as far as possible, again lifting the knee and carrying the leg forward (Fig. 29).

FOR KNEE EXERCISE, stand erect with the weight of the body on the left foot. Raise the right foot till the calf of the leg touches the thigh. Place the foot to the floor noiselessly or drop it heavily. (Fig. 30.) Either extreme will produce the desired result of removing the rigidity of the leg at the knee joint. Now stand erect with the weight of the body on the right foot. Raise the left foot till the calf of the leg touches the thigh. Place

32. ANKLE EXERCISE, FOR FREEDOM OF THE LEGS.

33. REVERSE OF FIG. 32.

the foot to the floor noiselessly or drop it heavily, as before. (Fig. 31.)

For the Ankle Exercise, stand erect with the weight of the body on the left foot. Raise the right foot and put sufficient strength in the leg to shake the foot. (Fig. 32.) Now stand erect with the weight of the body on the right foot. Raise the left foot and put sufficient strength in the leg to shake the foot. (Fig. 33.)

Health of body, health of mind, and graceful carriage of the body may certainly be acquired by systematic daily practice of the foregoing exercises: when these shall have been attained, beauty of face and form will be the natural result. Health, grace, and beauty are as sure to follow a steady, persistent, regular application of these principles, as the night follows the day.

Considering the Delsartean philosophy wholly from a practical standpoint, I have studiously avoided entering the realm of gestures and attitudes. While the practice of the latter is greatly beneficial to all, it is especially intended for those who appear in public,—on the rostrum, in the sacred desk, or on the stage.

When you have learned how to stand, walk, sit, kneel, bow, stoop, go up and down stairs, etc., with economy of force and with gracefulness, the mission of this article shall have been fulfilled.

Edward B. Warman, A.M.

Author of "Physical Training, or The Care of the Body;" "Practical Orthoëpy and Critique;" "How to Read, Recite, and Impersonate;" "The Voice: How to Train it and How to Care for it;" "Gestures and Attitudes: An Exposition of the Delsarte Philosophy of Expression" (now in press).

Dr. Bisland's Diary.

Jan. 7th, 1889.—'Hem! I, Oliver Bisland, M.D., aged thirty-seven years, a physician in good standing, and generally supposed to be of sound mind, am going to keep a diary!

In self-extenuation, however, let me add that I do it, not to please myself, but because a certain wee darling of a woman, whom I married a year ago, has made me promise to do so. She started this morning for San Francisco, to visit the old home-nest, and is to be absent a whole month; and during that dreary period of widowerhood I am not to let my head touch my pillow a single night until I have made an entry in this diary, said entry to consist of a recapitulation of my movements during the day,—where I have gone, what I have done and said, and how often, when, and where I have thought of my blessed little wife.

Exacting? Not a bit of it: she is simply in love with me. Jealous? Oh! well, isn't jealousy the shadow of intense love? and isn't it better for her to be wholesomely jealous of me, than to be making me unwholesomely jealous of some other fellow?

So now, to begin: I have thought of her to-day—let me see, how often? Why only ONCE! But that once has been all day, hence nothing less than "small caps" can express it. Went with her to the depot at 10.30; waved a last good-by at 11; came straight home to luncheon; spent the afternoon in the usual professional routine; came home at 8.30; it is now 9, and—I am sleepy.

Jan. 8th, 9 *P.M.*—Have thought of my dear little wife to-day about—well, to speak within bounds, about seven hundred times. She will have to excuse me from specifying just where and when each thought presented itself, as neither the night nor my diary would be long enough for such an entry.

Sudden change in the weather to-day: down went the mercury; everything congealed. Have fears of a snow blockade for Louise in the Siskyous. Poor little woman! She would be dreadfully frightened.

Jan. 9th.—I feel somewhat better to-night, having had a dispatch from Louise from the California side of the mountains, and am thus relieved of all fears of a blockade. Have thought of my pet to-day more times than I can enumerate. One more day, and then she will be safe with the old folks at home. Heigho! Keeping a diary is slow work, and this one, I predict, is going to be slow reading, unless something occurs before long to stir its sluggish current. I don't like to do things indifferently well: I want something to write about, something to give zest and interest to my diary.

Jan. 10th, 10.30 *P.M.*—Was kept out later than usual to-night by an inconsiderate man who broke three of his ribs. Don't think much of the discrimination of a man who breaks his ribs in such weather as this. Mercury down to zero, and a raking storm of sleet blowing from the north-west. God pity the homeless on such a night! How my coal fire glows and scintillates; how comfortable is my arm-chair. I could write for an hour yet, if I only had anything to say. Why can't something happen to shake me out of the rut of routine and—Hark! What was that?

Jan. 11th, 10 *P.M.*—Something *has* happened! I was interrupted last night by a strange sound, like a moan of pain from a being in distress. It seemed to come from outside, near my study window, and was half swallowed up in the shrieking voice of the storm. It drew me to the window, where I peered out into the chaotic night. All was one blur of storm and darkness; but soon the sound came again, fainter and more piteous, as if the limit of endurance were almost reached. I raised the sash and called out, "Is anyone here?" There was no reply, not even an answering moan; and closing the window, I hurried out into the hall, flung open the front door, and advanced to the edge of the veranda.

The darkness was so dense, the storm so blinding, that I had almost trodden upon a slender female form lying prostrate at my feet, before I became aware of its presence. Pushing back the front door, that the hall lamp might lend me its light, I bent over the stranger. There was no movement, and no sound from the chilled and pallid lips. I lifted her gently and bore her into the light and warmth of my study, where I laid her on my lounge, and turned to ring for Nora, our faithful maid-of-all-work. But a glance at the clock on the mantel stayed my hand: it was 11 o'clock. Nora had doubtless been in the land of dreams for two hours past, and the emergency was scarcely great enough to justify me in disturbing her; so I went to work, single-handed, but systematically, to restore the unfortunate young creature to consciousness. By dint of much chafing and toasting I finally accomplished my object, and a pair of beautiful, wondering brown eyes opened and gazed up trustingly into mine. I smiled reassuringly. "Drink this," I said, presenting a hot draught I had prepared, "and you will soon be all right."

She obeyed without a word, and sipped the draught in a delicate way that of itself was a guarantee of the highest breeding. Evidently it was no common waif that the storm had wafted to my threshold. Even then, draggled and storm-beaten as she was, I felt that I had never beheld so beautiful a creature, and inwardly thanked Providence for having guided her struggling feet to my door, rather than to some other where untold dangers might lie in wait for her.

How young and innocent she was,—scarcely past that mystic age "where the brook and river meet." There was an indescribable foreign look and air about her, and I longed to hear her speak; but professional instinct bade me not disturb her with questions. I was glad to see her sink down among the cushions and close her eyes, and for hours I sat beside her while she slumbered, watching over her, and keeping the fire up; but at length, overcome by weariness, I drew a warm rug over her and retired to my own apartment.

When I awoke the storm had somewhat abated, and the pale glow of a wintry sunrise pervaded my room. My first thought was of the beautiful young stranger within my gates, and dressing quickly I went down stairs. But Nora had preceded me, and waylaid me in the hall to demand explanation of the stranger's presence in my study. I explained the episode of the night, and was both surprised and nettled to see that Nora listened with evident disapproval of the whole affair.

"An' ye'd better ha' kicked her down the steps, sor: we've no need o' vagrants 'round here," was her comment. This sounded absolutely inhuman to me, and I peremptorily ordered Nora to hold her tongue and go about her own business. She obeyed, but muttered darkly as she went that she "hated to see things goin' wrong when the poor, dear missus was away."

But in the study a bright, sweet glance of welcome awaited me, and I straightway forgot Nora and her idiosyncrasies. With a gentle inquiry as to how she had rested, I advanced and seated myself beside my patient. She murmured something in a tongue unknown to me, and thus was confirmed my suspicion that she was of foreign birth; but, as if determined to show her gratitude in some way, she nestled closer to me, with an inimitable charm of manner, looked up into my face with her tender, expressive eyes, and caressingly patted my hand.

Naturally, I, too, longed for some means of expression by which she could be made to feel my sympathy, and so I stroked her soft, beautiful hair, and tried to hold her hand; but she objected to the latter liberty. How I long to question her and learn her sorrowful story; and there is a trusting look in her eyes that tells me she would confide in me if she could. Never before have I so forcibly realized the crying necessity for a universal language. As it is, all I can do is to show her, by look and manner, that my house is her home so long as she sees fit to avail herself of its shelter. How I wish she might stay forever! Louise would be delighted with her.

By the bye, speaking of Louise, I had really forgotten—that is, I haven't thought of her quite so often to-day as usual; but that is because I have had an uncommonly busy day, and a great deal to occupy my thoughts. Bless her little heart! I know she is thinking of me, wherever she is. Heigho! I wonder why Louise couldn't have had great liquid brown eyes that set a fellow's head swimming when he looks deep into them?

Jan. 12th.—I don't like Nora's demeanor toward my young *protégée*, and I can see that the latter feels it also, such an uneasy, hunted look comes into her sweet eyes when Nora enters the study. What business has a servant in her master's study, any way, with her threadbare excuse about "setting things to rights"? I'm thinking we've spoilt Nora with over-indulgence. I should be sorry to part with her, but she must come down off her high horse or she will have to go. Just as if a man didn't know his own business in his own house!

As I write to-night, my young guest sits gazing dreamily into the grate. What a world of sadness in the sweet brown eyes! I am sure that, young as she is, her heart is broken. Would that I could get my hands on the scoundrel that has done it!

Jan. 13th, 11.30 P. M.—Little did I dream, when I wrote those closing words last night, how soon my wish was to be realized. Not that I have yet got my hands on the villain, but I feel sure that I have seen him, that he has been here to-night, on my own premises. After a delightful evening with my beautiful guest, I retired, and was just drifting off into a doze, when I was aroused by the sound of a masculine voice murmuring energetically beneath my window, which is directly above the study window. I arose, softly lifted the sash, and peered downward. But guarded as were my movements they had been heard, and I was only in time to catch a glimpse of a dark, stalwart form disappearing around the corner of the house. Scoundrel! Does he think to follow her here with his base influence, and lure her from the best friend she ever had? We shall see! Wait!

Jan. 14th.—A dreadful thing has happened—too dreadful to be put down in black and white, yet something impels me to record it here. All the evening she was restless and uneasy, and when I bade her good-night I could almost have sworn there were tears in her sweet eyes. I longed to whisper some word of caution and reassurance in her ear, but as she could not understand me, it would have been useless; so I took her in my arms and threw what fervor I could into a fatherly caress. Then I came upstairs, but instead of retiring I softly opened my window—and waited. Soon he came, so soon that I almost thought she must have given him a signal; and that maddening suspicion prompted the rash act that followed.

Seizing a heavy brass paper-weight, I leaned far out, and just as he was murmuring sweetly, "Marie, Marie," I sent the missile crashing down through space. I am no marksman, and don't think I ever hit anything before in all my life; but I hit him! There was a wild, awful shriek, then all was still. A cloud, black as the doom of a murderer, came over the moon, and I could not see whether he had fled, or—I began trembling, and my teeth chattered as I listened and heard only the sighing of the wind around the west gable. At last I crept down stairs, out at the front door, and around to my study window. He was there, prone and dead, with his skull frightfully crushed. Nerving myself to a superhuman effort, I dragged him into the shadow of the grape-arbor; then, getting a shovel, I scooped a hole and covered him from sight. Ugh! I wonder if any one saw? I wonder if she saw?

Feb. 2nd.—My wife will be home to-morrow. For nearly three weeks I have made no entry in my diary, and I promised Louise not to miss a night. If I could only tell her all, she would forgive me the broken promise; but I cannot. I dare not. Were I to detail to her the ghastly work of that night she would turn from me in horror and repugnance, she is so tender-hearted.

Nora sent a chill of apprehension through me this morning by saying, in that scathing, disagreeable way of hers, that I could rest assured her mistress would not for a moment tolerate the presence of "that crayture" in the house after her return. She seemed so positive about it that she has made me feel rather uneasy. Louise is not given to ugliness and ill-temper, but, all the same, you never can quite tell how a woman is going to take things. Imagine my feelings if she should not take as kindly to my pet as I have hoped! What if she should make a scene! I cannot imagine Louise doing such a thing, but, to be on the safe side, I have decided to remove my *protégée* for a day or two, so that I may have time to prepare Louise for her reception.

I am almost startled when I realize how my heart has gone out to that beautiful creature! One thing is certain: I will not—I cannot give her up! I call her Marie, now,

and she likes it, and repays me in her own sweet way. I am trying to teach her to murmur my own name,—my Christian name,—and the day when I first hear it from her lips will be a memorable one to me. If she saw anything that night she has given no sign, and she is just as sweet and affectionate with me as she can be.

I have cautioned Nora not to mention Marie to my wife, on pain of instant dismissal, until such time as I shall have set matters all smooth. For the sake of her situation she will obey. So now to seek a temporary haven of refuge for my friendless darling.—There! I did not mean to let that word slip off my pen; but there it is, and I am not coward enough to erase it. No one will ever see these pages, anyway. Since I cannot show my diary to Louise, I will lock it in my desk, secure from all eyes.

Feb. 4th, 11 *P.M.*—I had locked away my diary and thought never to write in it again; but I find I have to record some curious and unforeseen developments. Louise arrived yesterday, looking bright and glad to be at home again. Of course I, too, was glad, but naturally my gladness was somewhat clouded by my anxiety about certain things. Louise asked almost immediately for my diary. I told her there was none, that I had made a miserable failure of it and burned it up.

Not being a practiced liar, I suppose I did not acquit myself well; for I noticed that Louise looked at me doubtingly. But she said nothing, and I thought the diary business settled. Imagine, then, my surprise, when, on coming home to luncheon, she met me with red eyes and a chilling hauteur that boded ill for our domestic felicity. In vain I begged to know in what way I had offended her, and brought to bear some of the alluring wiles I had found so effective in the days of courtship. She remained cold and silent as an iceberg until I took my hat and had my hand on the door-knob; then she suddenly flamed out:

"Yes, I will tell you what is the matter. I have found out that my husband is a liar, and a—a—I have read your diary, sir!"

Forgetting all this statement implied, my thoughts flew at once to Marie, and I exclamed, "O Louise, then you know about Marie! You will let me bring her home at once, won't you, dear?"

"What! Oh! you shameless, inhuman monster! You bring her here if you dare! I'll scratch out her eyes, sir, that's what I'll do!" The words shot out from between her pretty little white teeth with the force of a bomb.

This was so unlike my sweet-tempered Louise that I stood aghast. Was she losing her reason? Before I could frame another sentence she had flung the door shut in my face and locked it. I turned slowly away and walked downtown like one in a dream. "Scratch her eyes out!"—those beautiful, shining, tender eyes. Never! I would protect the owner of those eyes, and keep her in comfort, even though I were driven to the alternative of setting up a separate establishment for her.

I did not hasten home when evening came: there was nothing to hasten for. I stopped in to see Marie, at the house of my friend who was keeping her for me. She was so glad to see me, and showed her joy so charmingly, in her pretty, frank way, that I lingered a long time with her. It was near nine o'clock when I finally tore myself away and came home.

The house was all still and dark, but as I entered the gate I caught a faint glimmer of light from the grape-arbor. That was odd, and I quaked all over as I crept cautiously in that direction and heard the unmistakable stroke of a shovel on the frozen ground. When I came near enough to peer inside, I was struck with astonishment to see Louise, shovel in hand, digging away at the spot where I had buried him!

Her poor little face looked ghastly in the flickering light of a half-shaded lantern. I drew back and waited. Only a moment; then the shovel ceased to ring, and, bending down, she took him gingerly by one ear and lifted him out of the hole.

For a full minute she stood gazing at him, with the most utterly dazed look I ever saw on a human face; then she seized the lantern, turned, and ran out of the arbor,—right into my arms. She gave a startled shriek, then, pointing backward, she gasped,

"O Oliver! It's—only a cat!"

"Why of course it is, dear," I answered. "What did you imagine it was?"

"Oh, I thought it was a man!—her lover! Your journal said—O Oliver, I must be going mad! The next thing you'll be telling me that *she* is a cat,—she, that wicked Marie, who has stolen your heart from me!"

"Stolen fiddlesticks!" I ejaculated, inelegantly. "Don't be a goose, Louise. Of course Marie is a cat,—the loveliest, cutest, dearest little Maltese kitten you ever saw in your life. What on earth did you think she was?"

For answer, Louise fell into my arms in a violent fit of hysterics; and I am completely mystified as to what it was all about. Women are such inexplicable creatures! The next time I keep a diary for my wife's amusement, she'll know it!

CARRIE BLAKE MORGAN.

How to Harness and Unharness a Horse.

MANY ladies are in the habit of driving about the country unattended by a groom, as those who drive in city parks usually are, but it is safe to say that not very many of these amateur drivers know much about the harness, or how the horse is put into and out of it.

A very interesting episode in a late novel is occasioned by the heroine's total ignorance of how to unharness the horse, and the dilemma she thus found herself in. Of course an elegant young man who knew all about everything in the world was at hand to assist her,—and fall in love with her besides; but the average young woman cannot always be sure that such a gallant gentleman will be at hand when needed. She will, if ignorant of the uses and appliances of various parts of the harness, find herself very helpless in case of a trifling accident, not necessarily from want of strength and pluck to grapple with the difficulty, but from sheer ignorance.

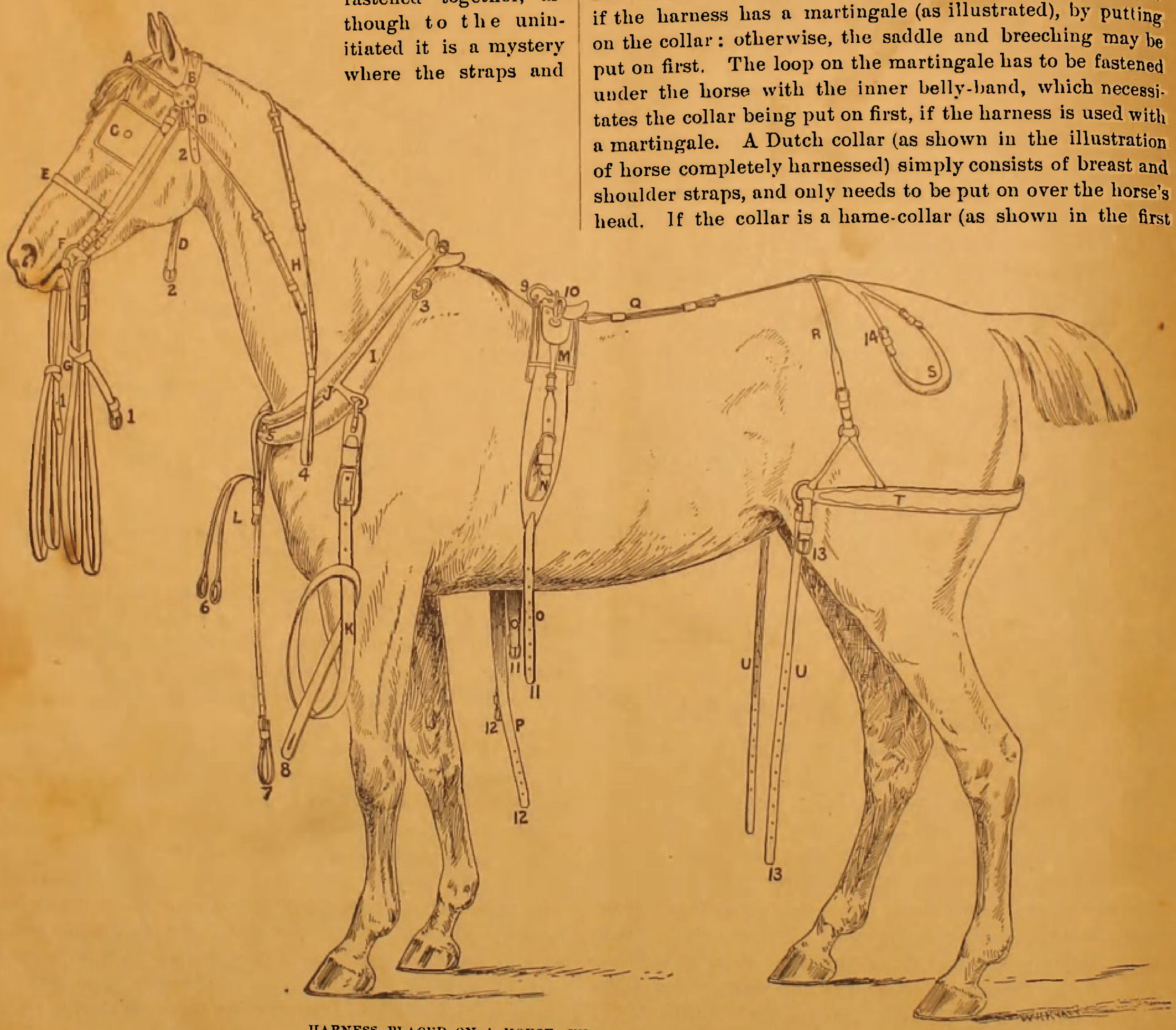
For the sake of her own safety, every woman who drives at all should make herself thoroughly acquainted with the names and uses of every strap and buckle of the harness, and should be able, if necessary, to harness and unharness her horse herself. This is, of course, the groom's work; but it is assuredly wiser for a lady to understand the matter, in case of an emergency, as well as to detect any carelessness on the part of the attendant. A lady may return from her drive sooner than she expected, and find no one about the place to "put up" the horse; or she may wish to go out when there is no one around to harness the horse for her, and she will find it very convenient to know how to proceed in such cases.

We illustrate and describe single harness only, because double harness is almost too much for a woman to manage alone, unless thoroughly familiar with all kinds of horses and harness, in which case she would need no written in-

structions. Single harness with breeching is illustrated; but it often happens that there is no breeching, even to single harness, as with some light carriages it is not really needed, except in hilly districts.

The first thing to do is to know each piece of the harness by its proper name. To do this, look over the harness well with the illustrations and list given herewith, and get your husband, father, brother, or groom to assist you to identify each separate piece of it.

There are three divisions of the harness which are put on separately and then fastened together, although to the uninitiated it is a mystery where the straps and



HARNESS PLACED ON A HORSE, WITH THE BUCKLES UNFASTENED.

A. Brow-band. B. Head-band. C. Blinder. D. Throat-strap. E. Nose-band. F. Bit. G. Reins. H. Check. I. Collar. J. Hames. K. Trace. L. Martingale. M. Pad or Saddle. N. Shaft-tug. O Inner Belly-band. P. Outer Belly-band. Q. Back Strap. R. Hip Strap. S. Crupper. T. Breeching. U. Holdback Straps.

buckles are located that are to be undone when the horse is unharnessed. A lady known to the writer, with more zeal than familiarity with the subject, finding it necessary to unharness her horse, unbuckled every strap in the harness, and felt that she had demonstrated the ability of her sex to cope with matters usually considered clear only to the masculine understanding. Of course no irreparable damage was done: but fancy the feelings of the man whose duty it was to put that harness together again!

The first illustration shows the near, or left, side of a horse, with the harness placed in position, but unbuckled, as brought from the harness-room. The lettering is explained by the list printed below the illustration, the harness comprising as follows: The bridle, consisting of brow-band, head-band, blinders, throat-strap, nose-band, and bit; the collar, to which are attached the hames, martingale, and traces (if a Dutch collar, only the two latter); and the saddle, to which are attached the inner belly-band, the outer belly-band, shaft-tugs, back-strap, crupper, hip-straps, breeching, and holdback straps. The reins and check-rein are attached to the bridle.

Now you are ready to harness the horse. A horse should always be approached on the near, or left, side. Of course some of the harness has to be fastened on the off, or right, side. also. When the horse is taken out of the stable, begin, if the harness has a martingale (as illustrated), by putting on the collar: otherwise, the saddle and breeching may be put on first. The loop on the martingale has to be fastened under the horse with the inner belly-band, which necessitates the collar being put on first, if the harness is used with a martingale. A Dutch collar (as shown in the illustration of horse completely harnessed) simply consists of breast and shoulder straps, and only needs to be put on over the horse's head. If the collar is a hame-collar (as shown in the first illustration), pass it over the horse's head with the narrow end pointed downwards, and as soon as you get it over his ears, on the narrowest part of the neck, twist it around so that the narrow end points upward.

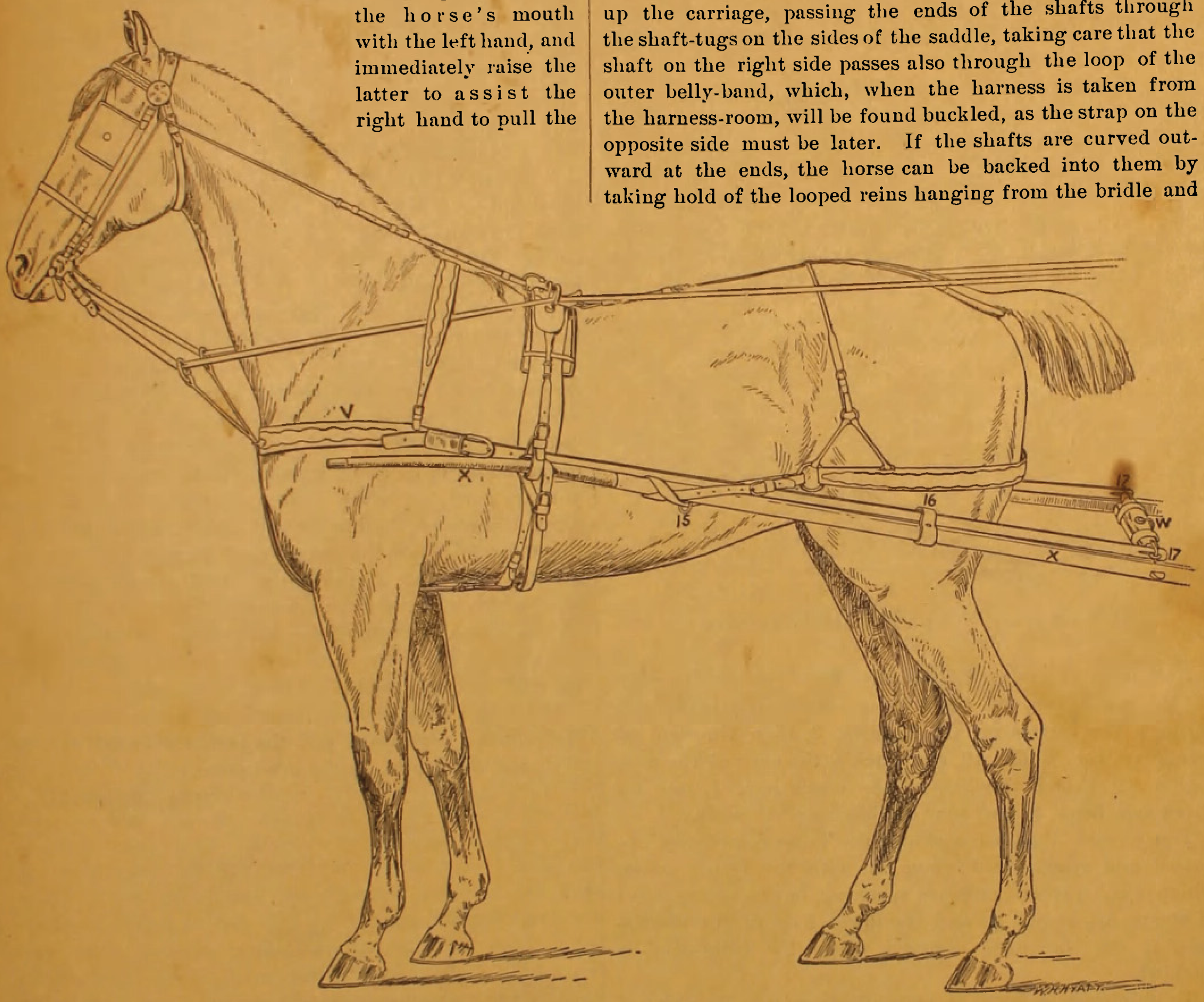
If, however, the horse's head is too large to allow the collar to pass over without unfastening the hames, it will be necessary to undo the latter at 5, and after the collar is in place put the hames on and buckle them again in front at 5. Then put on the saddle, drawing the crupper, which is attached to it by the back-strap, under the tail. The horse may object to this, in which case you will find it necessary to unbuckle the crupper-strap at 14, and put it around the tail and buckle it again. Then slip the loop of the mar-

tingale, 7, over the buckle 11 of the inner belly-band, and buckle the latter (11 and 11), making it tight enough not to slip in any way, yet not painfully tight. If the finger can be pushed under the belly-band when buckled, it will be found about right. If the harness has no martingale, the saddle and back harness can be adjusted first, and then the collar put on.

Now you are ready to bridle the horse. Remove the halter and catch hold of the horse's head by the forelock, with three fingers of the right hand, leaving the forefinger and thumb free, and having the bridle in the left hand. Pass the head-piece of the bridle to the thumb and forefinger of the right hand, slip the bit into the horse's mouth with the left hand, and immediately raise the latter to assist the right hand to pull the head-piece back over the horse's ears. If the horse refuse to open his mouth for the bit after two or three attempts, hold the bit to his teeth and press the under lip, at the side, against the tooth, very lightly at first, and then a little harder. It will hurt a little, and the horse will open his mouth. Sometimes a lump of sugar will accomplish the same object, and you can slip the bit in before the horse can object. A little coaxing and patting is a great assistance. Horses are very sensitive and susceptible creatures, and dearly love to be petted and praised.

When the bit is in place, buckle the throat-strap at 2 (throat-latch, some call it). If the bit is an ordinary ring-bit the bridling is complete, as illustrated; but with a curb-bit (see separate illustration) the curb-chain hanging from the small ring of the bit must be twisted until it comes flat, and then hooked, passing under the horse's jaw to the curb-chain hook on the opposite side of the bit. The curb-chain should not be too tight: it should be loose enough to admit of a finger being easily inserted under it. The reins should be buckled in the slots of the curb next below the bit-ring (see separate illustration of the curb-bit). When buckled in the bit-rings they have no action on the curb, and are only buckled in the lower slots for exceptional cases when it is necessary to drive with a heavy curb.

Now your horse is ready for "putting to" the carriage. If the shafts are lying down, do not bring him near enough to walk on them, but lift them above his back, then draw up the carriage, passing the ends of the shafts through the shaft-tugs on the sides of the saddle, taking care that the shaft on the right side passes also through the loop of the outer belly-band, which, when the harness is taken from the harness-room, will be found buckled, as the strap on the opposite side must be later. If the shafts are curved outward at the ends, the horse can be backed into them by taking hold of the looped reins hanging from the bridle and urging him to step backward. It may be found more convenient to prop up the shafts and back the horse under them.



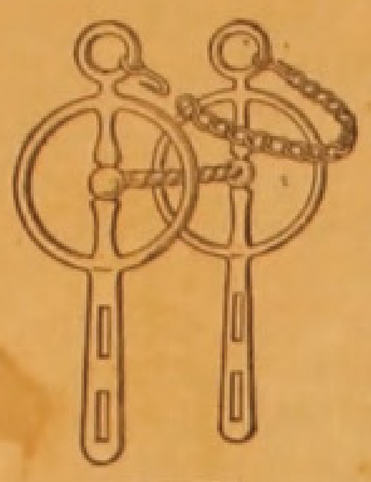
HORSE COMPLETELY HARNESSED WITH A DUTCH COLLAR HARNESS.

V. Dutch Collar. W. Whiffletree. X. Shaft.

Uncurl the traces, run them first through the loops, 16, at the side of the shafts, and fasten them onto the trace-hooks, 17, on each side of the whiffletree, and run the little tags on the whiffletree into the trace-hooks.

Make the horse step up until the traces are taut, and then proceed to fasten the breeching, or holdback straps. Draw the tongue of the holdback strap under the trace and shaft and forward through the ring, or loop, on the shaft at 15, put it once over the shaft, slide the tongue of the strap backward under the strap around the shaft, and

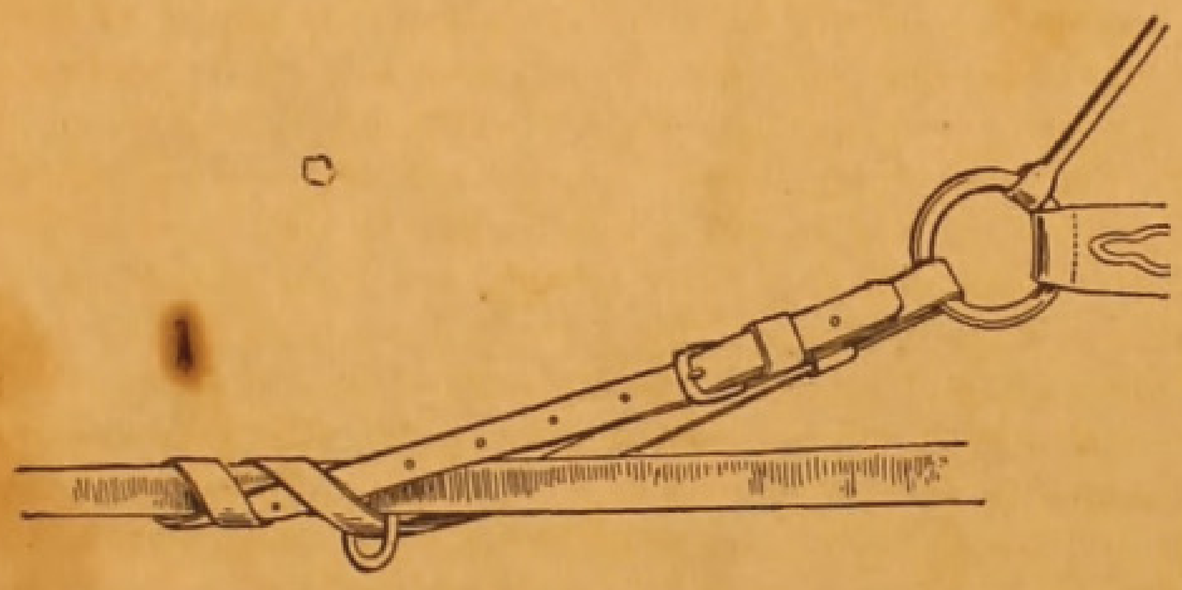
buckle back to the breeching at 13. This strap must go once or twice (or more times) around the shaft, according to the requirement of the harness. The breeching at the back must sag away a little from the horse's hind-quarters when he has been made to step up till the traces are taut.



CURB-BIT.

The separate illustration of the breeching, or holdback, shows the strap going twice over the shaft; but in every case the tongue of the strap, in going back towards the buckle, must be pushed under the strap wound around the shaft. The strap on the right side must be buckled over the shaft in the same manner, and the traces will then run free between the straps and the shaft.

Lastly, bring up the outer belly-band on the left side, inside the shaft and forward of the shaft-tug, run the tongue of the strap backward through the shaft-tug, and buckle it over the shaft, back of the tug. To one not accustomed to harness, this last strap may seem almost useless; but a very serious accident may occur from carelessness in buckling it: if it becomes unbuckled going down a hill, a horse has no chance to hold back the vehicle.



HOLDBACK STRAP WOUND TWICE AROUND THE SHAFT.

Now undo the reins, 1, pass them first through the rings on the martingale (if there be a martingale) at 6, then through the terrets on the harness, 3, then through the terrets on the saddle, 10, and buckle the ends of the reins together. Fasten the loop of the check-rein, 4, into the check-rein hook, 9, and your establishment is ready.

The second illustration shows the horse completely harnessed and ready for driving, but with the Dutch collar, which is not a collar, properly speaking, but an arrangement of straps, to be put on and the lower loop of the martingale, if one be used, secured when the belly-band is buckled.

To unharness a horse is naturally to reverse the order of harnessing him. Unbuckle the ends of the reins and pull them out, one at a time, from the terrets, and loop them to the bridle, as shown in the separate illustration, folding the rein and drawing double through the bit-ring, and tying the end about one-third of the way to the looped ends. Take the check-rein from the hook, unfasten the outer belly-band on the near, or left, side; unbuckle the two holdback straps, pull them out of the rings or loops on the shafts, and slide the tongues through the buckle slides, unhook the traces, pull them out of the shaft-loops, 16, and loop them up as shown in the first illustration.

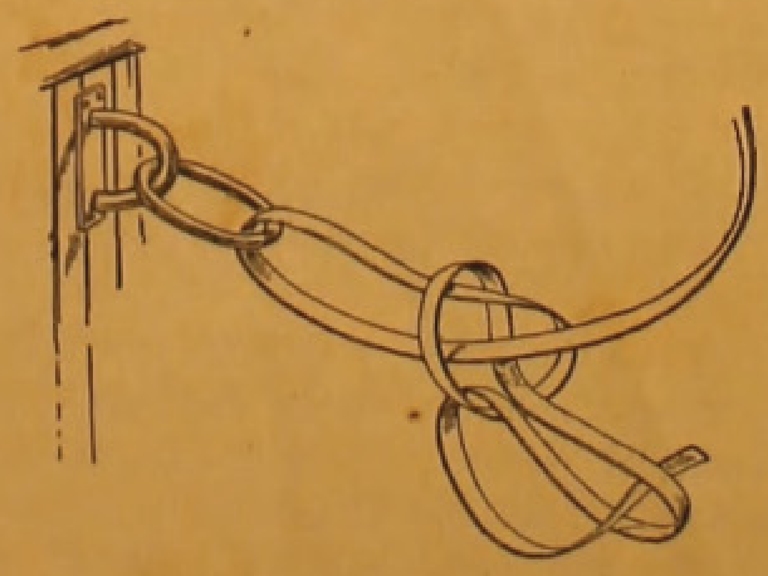
LOOPING REINS TO BRIDLE.

Push the shaft-tugs forward on the shafts as near the ends as possible, take firm hold of one shaft, and walk the horse out of the shafts; then undo the inner belly-band and remove the saddle and breeching. Hang it up in the harness-room by the top of the saddle and the back of the breeching, and never by any of the straps. Turn the collar around the narrow end pointing downward (if the hames will not pass over the horse's head first); they must be unbuckled and taken off unhook the throat-strap, and curb-chain, unbuckle bridle together, if it is pull off collar and this, run your left hame-collar. To do band and draw it over thumb under the head-with your right hand the horse's ears, while collar. Let bridle and you are drawing off the arm while you slip the collar slip over the left head, buckle the halter on the horse's halter, and tie up the throat-strap on the horse.

Some horses know enough to untie an amateur knot; but we illustrate a way of tying the horse which makes a knot impossible for anyone of the equine grade of intelligence to undo with their teeth. Put the end of the halter, or tie-strap, upward through the ring to which you are going to tie the horse, turn the end once under the slack of the rope, double the end to form a loop, put it over the rope, and draw the looped end through the first turn made. Now draw it up tightly. Pull up the slack of the rope, which will carry the knot to the ring, and put the end of the halter, or strap, through the loop. To untie it, pull out the end from the loop and give it a sharp pull, and the cord, or strap, will hang loose in the ring.

When you have tied the horse, hang up the collar, narrow end pointing downward, and the inside outward, so it will dry; and the bridle, by the head-piece.

MARY MARTINGALE.



HOW TO TIE UP A HORSE.

Dallo.

"OLD Rocks" was a tramp reporter, and, in general appearance, one of that easy-going style of Bohemian scribes whose lazy, shiftless mode of living, or, more properly, existing, has caused a decay in that once remunerative branch of the fourth estate, gipsy-journalism. He was a silent and reserved man, and never "chummed" with anyone, under any circumstances. His features were handsome, yet, from some indescribable reason, repellant. They were sufficiently hard enough to suggest a flinty, unswervable disposition, which, in turn, would cause one to wonder if he acquired his nickname of "Rocks" from the possession of a "rocky" character.

Few editors, indeed, but knew him and recognized in him a reliable man; yet it is exceedingly doubtful if they knew his proper name. Unlike many newspaper men, he never received a letter through the post-office, was acquainted with no wire-pulling politicians from whom t receive communications, and when he received his envelop

from the cashier it was invariably endorsed "Rocks." As far as known, no one ever became sufficiently familar with him to venture a query as to what his name might be; in consequence, he was simply "Rocks" or "Old Rocks," wherever he happened to sojourn.

Like all odd characters he had a hobby, which, though he never conversed on the subject, occasionally popped to the surface in his writings, like a bubble in a boiler. His hobby was a firmly grounded belief in supernatural agencies. He was a fanatic on a theory of spiritualism entirely his own. As he was never known to make libations at the shrine of Bacchus, his hallucinations were not attributed to indulgence in liquid stimulants, although many of his brother scribes suspected him of puerile dabbling in the brain-deadening sweets of narcissus extracts. Aside from his talents as a writer, "Rocks" was a highly accomplished violinist; and regarding his violin he entertained very peculiar views.

In some verses that appeared in a magazine, under the signature of "Rocks," it was surmised that he had betrayed the key to his silent but restless life. The poem was the tale of a traveler who, like the "Wandering Jew," was ever cursed with the spirit of unrest. It told of a Parsee's daughter who unfortunately fell in love with a Christian whom her father refused the privilege of paying addresses to the daughter unless the suitor abjured his own religion and became a fire-worshiper. This proposition was indignantly refused by the Gentile, who immediately planned an elopement, to which his *fiancee* agreed. The *denouement* was sad in the extreme. While making her escape, the maiden was accompanied by her faithful *ayah*, about whom she had neglected to tell her lover. Mistaking the *ayah* in the darkness for some male servant who wished to prevent him from carrying away his love, he leveled a pistol at her, whereupon the maiden, to shield her nurse, threw herself between them and received the bullet. The luckless lover gazed once on the face of his dead betrothed, then pressed his finger-tips to his eyes as if to shut out the horrible picture from his view, and started forth into the world, where he became an unceasing wanderer. Thus ran the tale, and many conjectures were made as to whether "Rocks" was not the unfortunate hero; still no one dared to intimate that such was his opinion.

The poor scribbler believed that inanimate objects were mediums that departed spirits endowed with souls that flitted as messengers between the spirits gone before and the loved ones left behind. His violin was his special medium, and such was his supernal faith in his individual creed that he believed the violin influenced the beautiful and harmonious strains his own skillful, well-trained hand nightly drew from the stringed shell. He never selected hotel lodgings or attempted to secure accommodations in a boarding-house. He possibly thought his midnight and early morning concerts might aggravate his fellow lodgers; so his lodging was usually in some almost barren room at the top of a building in the center of the business portion of the city, where it was most likely to be deserted during the night.

He little knew that a crowd gathered under his window and listened to the soulful tunes which he caused his medium or his medium caused him to weep and laugh. He played with the fire of an enthusiast, and, although he heard it not, the crowd below would catch the spirit of his playing and accompany him in a crude sort of a way, alternately listening with astonishment and pleasure. Schubert's beautiful "Adieu" would ring out clearly and hold them as if enchanted, and when the last long, sighing note would seemingly die away, it merely melted into the first strains of the "Serenade." These would be followed by German popular songs, and then a long succession of the airs, now lively, now pathetic, now dramatic and passionate, out of the old operas that delighted the world for years, "The Huguenots," "La Traviata," "Rigoletto," or Balfe's graceful "Rose of Castile" and "The Bohemian Girl." Totally oblivious to his musically ignorant and motley audience below, his face would shine with the ecstasy of the true musician. The passionate, sweet music of "Don Giovanni" and "Il Trovatore" would glide into soft, but intense, Italian melodies, sometimes some of Moore's Irish airs, and for hours hold his unknown audience enthralled. He usually finished with one of the difficult passages of "Martha," with its brilliancy of shake and cadenza, or the heart-broken, plaintive sob-notes of "Adieu," which, even in winter and muffled through the window-pane, often caused the cold, shivering throng of listeners to wipe unbidden tears from their eyes as the last strains slowly faded on the early morning air.

He never used the medium on rainy or cloudy nights when the stars failed to shine; for, with all his good judgment on ordinary matters, he was weak-headed and imaginary in others. He believed his medium visited a certain star in the ethereal on stormy nights, and that during its absence there was no music in the violin. At such times he was moody and restless, and if he appeared at the office the next day, his knit brows and red, swollen eyes told he had been without sleep. No doubt his superior officer may have suspected him of passing the night in riot and gaming; but whatever his suspicions may have been, they were never declared.

On the contrary, when the canopy of night was well-peppered with stars, he was in his delight. Could his co-workers have seen him then, they would have been astonished in more ways than one. They would have been surprised at the gayety of his mood, the untrammelled flow of his spoken meditations, and the strangeness of his conversation with some one unseen.

"*Voi che sapete che cos 'e amore,*" * he would sing softly in Italian, while he sank to his knees on the bare flooring, then rested his face in his hands and gazed enraptured at a particular star in the heavens, which he believed was the home of the goddess who enchained his affections.

"Art thou lonely, Dallo?" he questioned of his star, one morning. "Sweet one, bid me end my wanderings and come to thee. Oh, let me cease my penance and cheer thee in thy distant hermitage. Must I suffer always thus? Say that I may stop my pilgrimage and rest. Do not taunt me so! Do not say I sent thee there! Forgive me and grant me rest, for have I not atoned? Thy God will hear thy prayer and ease my load of sorrow. Thou smilest, and thine eyes flash beams of love through thy tears. Oh, wretch that I am, to have doomed us to eternal separation! Yes, thou hast the right to revile, to curse, to shun me forever. Thou'rt kind to show me thy face from afar,—kind, e'en though thy smiles torment my brain and make me melancholy mad. Bitter, indeed, is my atonement! My God! I cannot bear it!" And he threw himself at length on the cold floor, where he gave vent to stifled sighs and convulsive sobs, until nature calmed his brain with sleep.

The following day was the day before Christmas, and in the afternoon a delegation of eminent foreigners, who were sojourning in America to investigate marvelous inventions governed by electricity, visited the newspaper office where "Rocks" was employed, that they might see an electrical type-setting machine in the process of operation. One among the gentlemen wore a peculiar, wide-sleeved coat, and an enameled hat, without brim or crown, that had much

* "You know that you love me."—*Popular Italian air.*

the same appearance as a short link of japanned stove-pipe. It was really the insignia of the gentleman's rank in his own country. The hat was a shako. Close beside the gentleman was a lady, who was so thickly veiled as to make it an utter impossibility to distinguish her features; but the dainty fingers of one of her almost childish hands were uncovered, and as she stood a little back from the rest, who were examiniug the machine, she leaned her hand on the desk at which "Rocks" sat.

She little imagined the result of her very natural action. "Old Rocks" glanced at the hand, from thence to her veiled face and again at the hand, over which he leaned and boldly scrutinized a peculiarly shaped ring. He was visibly excited. His usually calm visage was as white as his shirt-front, and he trembled violently.

Suddenly he compressed his lips and watched the ring with an immovable gaze, as if his eyes were those of a chiseled statue; then mechanically his own fingers crept toward the object of his fascination, which he touched lightly with his forefinger and thumb. The result was electrical. Two parts of the ring upturned, and in the opening beneath them was disclosed his own picture.

For a second, as he gazed upon it, his white lips moved, but no sound came from them. When there did, it was but one word, in an almost sepulchral tone,

"Dallo!"

The lady turned quickly, and as she met his upturned, half-frightened gaze, she uttered a name in an unintelligible tongue, then fell fainting to the floor, while "Rocks" escaped in the ensuing confusion.

Down the long, steep flights of stairs he fled, glancing behind him with widely staring eyes, as though he had seen an apparition. It was on the verge of dusk, and the lights of the holiday shops were just being lit. Hither and thither he bumped and jostled, hatless and coatless, unmindful of where he was going, or of the fact that snow was falling and that thinly clad women and children and heavily muffled gentlemen and ladies, who shivered and turned their backs to the biting wind to catch their breaths, all gazed in astonishment at him and his airy attire. Up street and down, in and out alleys and byways, perfectly heedless, without the first idea of any point of destination, he roamed till midnight, rushing blindly where he might, and keeping a lookout over his shoulder, as if he expected or felt that he was being followed by someone from whom he wished to escape. He felt no cold: in fact, his face and body were aglow as he mechanically turned into the doorway that led into the barren nest in the top floor of the building where he slept.

The wind shrieked around the corner in a high key and blustered like a boisterous street-fakir or a bustling politician, while the feet of the hurrying pedestrians rang in quick succession on the cold pavements, and the keen, frosty air made clouds of their breath almost before it was ejected from their lungs.

The snow was drifting into piles wherever it found shelter from the driving blasts, and the wind occasionally amused itself by using the telephone and telegraph wires as æolian harp-strings through which it hummed a Christmas carol.

The chimes of St. Nicholas tinkled merrily on the frosty air as "Rocks" reached the top landing and inserted his key in the door of his room. He had been wont to hold high carnival with his violin on cloudless Christmas eves of other years; but if the sky had been as cloudless and unruffled as the calm, placid surface of a silver lake, he could not then have played a note. He was dazed. His nerves were unstrung. The belfry chimes had a harsh, irritating sound to his ear, and the wind, as it moaned and wailed down the open stovepipe-hole in the chimney, partook of a wild, weird, uncanny tone, such as he never remembered hearing before. It shrieked like a bird of evil omen.

He stood by the window in the dark, and a convulsive shudder occasionally ran through him. Reaction had come, and he shivered as he gazed out of the window and vainly attempted to view his star through the flossy flakes of snow that floated and fluttered on the swiftly whirling winds. He sank upon the bed and buried his face in his hands. The door of his room swung noiselessly inward, and the chimes sounded clearer through the open window in the hall.

"Crack-er-ack! Snap! Snap!"

He looked up. The electro-light from the opposite street-corner shone on the wall of his room where hung his violin. It was swaying to and fro. Its strings had snapped, and the bow was lying on the floor.

Did his eyes deceive him? or—no, they did not! The violin was slowly turning and sliding downward from the hook upon which it was suspended. He sprang forward to save it. Too late! It dropped to the floor, dashed itself into minute fragments, and the hum of its farewell wail echoed along the corridor, where it mingled with the chimes in which it was lost forever.

For an instant, as he gazed on the demolished instrument, "Rocks" appeared half-stunned; then he pressed his hands to his forehead and exclaimed,

"Thank God! 'Tis gone!"

And well he might; for with it was destroyed the hallucination that had for so many years held sway over him. It was as though a veil had been torn from before his eyes. He stood by the window a new man, and bravely met a shock that not five minutes before would have bereft him of his remaining reason.

"Merry Christmas! my dear," exclaimed a sweet, musical voice behind him.

He turned, and the electro's light shone on the polished shako of the foreign gentleman who had visited the newspaper office in the afternoon; but before he could express his astonishment, a *petite* form immediately beside him raised a veil from her handsome, oval face, placed a pair of soft, well-molded arms around his neck, while her pretty rosebud mouth so effectually closed his that he had time only to utter the one word "Dallo!" and read the unbounded love expressed in the tearful eyes that looked so yearningly into his own.

"Papa's a Christian now, and he's willing," she whispered in his ear.

And he was: he made almost as much love to "Rocks" on Christmas Day as did his daughter; he could scarcely do too much to express his joy at finding him.

The hallucination that possessed "Rocks" was caused by allowing him to use his violin before he recovered from an attack of brain-fever into which he was thrown by the shock of the accident related in the poem he wrote, of which, as surmised by his brother-journalists, he was his own hero. Dallo had only swooned.

"Rocks" is now a successful merchant at Punjab, in India. The only piece of his medium which he saved was a part of the back on which was glued the solitary copy he had retained of his sad poem. He still plays on a violin, and his audience is usually Dallo, who sits resting her head on his knees, the faithful *ayah*, and the grandfather, each of whom alternately holds a young "Rocks" or wee Dallo. There they listen to the soulful strains of music with which "Old Rocks" holds them fascinated as he did the tramps and street Arabs who listened outside his window when he was a roving reporter.

BURT ARNOLD.

Home Art- and Home Comfort.

China Painting for Beginners.

I.

WHAT is proposed in this and two other articles on the same subject (to be published in the July and August numbers) is to give as compactly and explicitly as possible such directions, rules, and suggestions as will, if faithfully and carefully followed out, insure good results, not in comparative relation to previous proficiency in drawing or painting, but in strict proportion to the natural good taste and deftness of those who shall attempt to paint china without other instruction than will be furnished in these articles.

Not all who paint are artists, and there are many artists who have never painted. Acquired skill and practical dexterity are quite different from artistic feeling and taste; but in china painting, perhaps more than in any other form of art, natural taste and feeling can, without the long and arduous training elsewhere required, find expression. This is because many adventitious aids, which in oil or water-colors cannot be used to any purpose or advantage, here insure, if properly used, the most novel and beautiful effects; and also because the difficulties in china painting are so largely mechanical and so easily obviated by the knowledge of certain expedients, formerly secrets of the trade, but secrets no longer to such as read these instructions, which, by their intelligent use, will enable a neat and careful worker to achieve very satisfactory results.

One of the most necessary qualities for the tyro in china painting is patience. Do not be discouraged with a failure or two: some little inadvertence, some failure to comply with the instructions or to supplement them, as all rules of the sort, however precise or comprehensive, must be supplemented, with a little native handiness, has intervened between you and the desired result. Never has the efficacy of the old advice given in the original blue-backed edition of Webster's Spelling-book been more fully exemplified and proved than in the final success of every china decorator who, mindful of it, has tried and tried again and refused to be discouraged by repeated failures. Not that failure, even on a first attempt, is in any sense of the word inevitable; but the chances of failure are much greater on the first than on the second attempt, and on the second than on the third.

Choice of Objects to Decorate.

The first thing to be done is to select with discrimination and care your china for decoration. For a beginner flat surfaces are much the best, as transferring a design to the curved exterior of a cup or vase requires both practice and experience. A plaque, a platter, or a plate, a level dish of any kind will answer, though it is better to avoid one with scalloped edges. Fine white French china is the best, although stone-ware and other white china can be decorated and fired. See that the selected article is perfect, without spots or flaws, as these, on firing, become obtrusive: the color is apt to retreat from their edges and make a blotch on the work. Do not, at first, attempt too large a surface decoration, for defects become conspicuous in proportion to their size.

Materials Required.

Camels'-hair pencils (or brushes), Holland quills, pointed, Nos. 1, 2, 3, and 5; camels'-hair liners, Holland quills, long hair, pointed, Nos. 1 and 3; camels'-hair writers, long hair, square, No. 3; camels'-hair stripers, Nos 3 and 5. The last mentioned are only to be bought if you prefer to attempt striping (a somewhat difficult process, for which directions will be given) to sending the work to be done where it is fired. The brushes should all be fitted into long, well-finished wooden handles, and each handle nicely whittled to a point that can be used to remove specks of dust or any extraneous matter settling on the work.

Two palette knives (see Nos. 7 and 10), one of steel and one of horn or some similar substance. Several dabbers (see No. 11). For these take the best quality of sarcenet silk, wash it well with Castile soap and water, cut it into pieces about six inches square, inclose in each piece as much cotton as it will hold, then tie the corners tightly together with a cord, over the cotton, so they will serve as a handle. Always be sure to wash a dabber every time it is used, or the color upon it will dry and make it useless.

A hand-rest, or bridge (see No. 1). This may be a home-made affair. It consists of a piece of wood two and a half inches wide by eighteen inches long and one inch in thickness. At each end is a block of wood two and a half inches wide and two and a half inches high. A support for the brushes, made of a strip of wood about nine or ten inches long, notched as seen in No. 6. A supply of stopping-out mixture, a composition of gum and whiting, which can be bought ready prepared.

Three drop-bottles (see No. 5). Anyone who has had occasion to measure out drops of liquid from a bottle will appreciate the convenience of this little contrivance, which consists merely of a quill set in a hole cut through the cork of a bottle, and the outer end of the quill cut to a point. Two large bottles, one for alcohol, the other for spirits of turpentine. Two small bottles, one for oil of lavender, and the other for ox-gall. A small bottle for oil of turpentine. To obtain this oil, let a little of the spirits of turpentine, about a thimbleful, remain exposed to the open air in a butter-plate or small saucer until it thickens into an oil. By adding a few drops to this every day, any required quantity can be obtained. A bottle of liquid India-ink.

A box (shown at left of illustration No. 2) to contain a supply of clean white cotton rags; two lead-pencils of the best quality, one hard and one soft; steel pens; a bit of yellow beeswax or modeling-wax; and a sharp penknife. A needle fixed in a wooden handle (see No. 8), for removing specks of lint or dirt from the painting. One dozen thumb-tacks.

A set of tube colors (see No. 9). The following will answer every practical purpose for the beginner.

Equivalents in Water and Oil.		Bases.
Prussian Blue.	Dark blue (*bleu foncé*).	No Iron.
Cobalt Blue.	Ultramarine (*bleu d'outremer riche*).	"
	Light brown (*brun clair*).	Iron.
	Dark brown (*brun foncé*).	"
Neutral Tint.	Neutral grey (*gris noir*).	"
Light ChromeYellow.	Jonquil yellow (*jaune jonquille*).	No Iron.
Yellow Lake.	Mixing yellow (*jaune à mêler*).	"
Ivory Black.	Ivory black (*noir d'ivoire*).	Iron.
Rose Madder.	Light carmine A (*carmin tendre A*).	Gold.
Carmine.	Deep carmine, No. 3 (*carmin No. 3 foncé*).	"
	Crimson purple (*pourpre cramoisi*).	"
Purple Madder.	Deep purple (*pourpre riche*).	"
	Violet of gold (*violet d'or fonce*).	"
Light Red.	Capucine red (*rouge capucine*).	Iron.
	Grass green (*vert No. 5 pre*).	Chromium.

In addition to these the following articles will also be found necessary.

One tube of flux; several sheets of finest French tracing

CHINA PAINTING, AND THE MATERIALS REQUIRED.

paper; some strips of gummed paper for fastening tracings to the surface of the china; a large and a small wire easel, the first for holding the original to be copied, and the second to support the work when it is to be looked at to get its general effect, etc.; a small glass muller, and a slab upon which to mix your colors (shown at right in No. 2); and a china palette, though, in case this be wanting, an old plate will do.

How to Use Your Materials.

Secure a place as free as possible from dust, and sit with the light coming over your left shoulder. Place what you require within easy reach, as shown in illustrations Nos. 2 and 4, such as are immediately required on the right, and the remainder on the left. A very useful appendage to your desk or table is a flap, or leaf, shown in the same illustrations, fastened on hinges under the projecting ledge of the top or lid, so that when not in use it can be folded away.

The object to be painted is held with the left hand, and rests against the edge of the desk or table while the right is busy painting it. Half-fill two of the drop-bottles, the one with alcohol, the other with turpentine. It is not a bad idea to have the top of the desk or table covered with clean paper, but not with a cloth cover or anything liable to give off lint or dust.

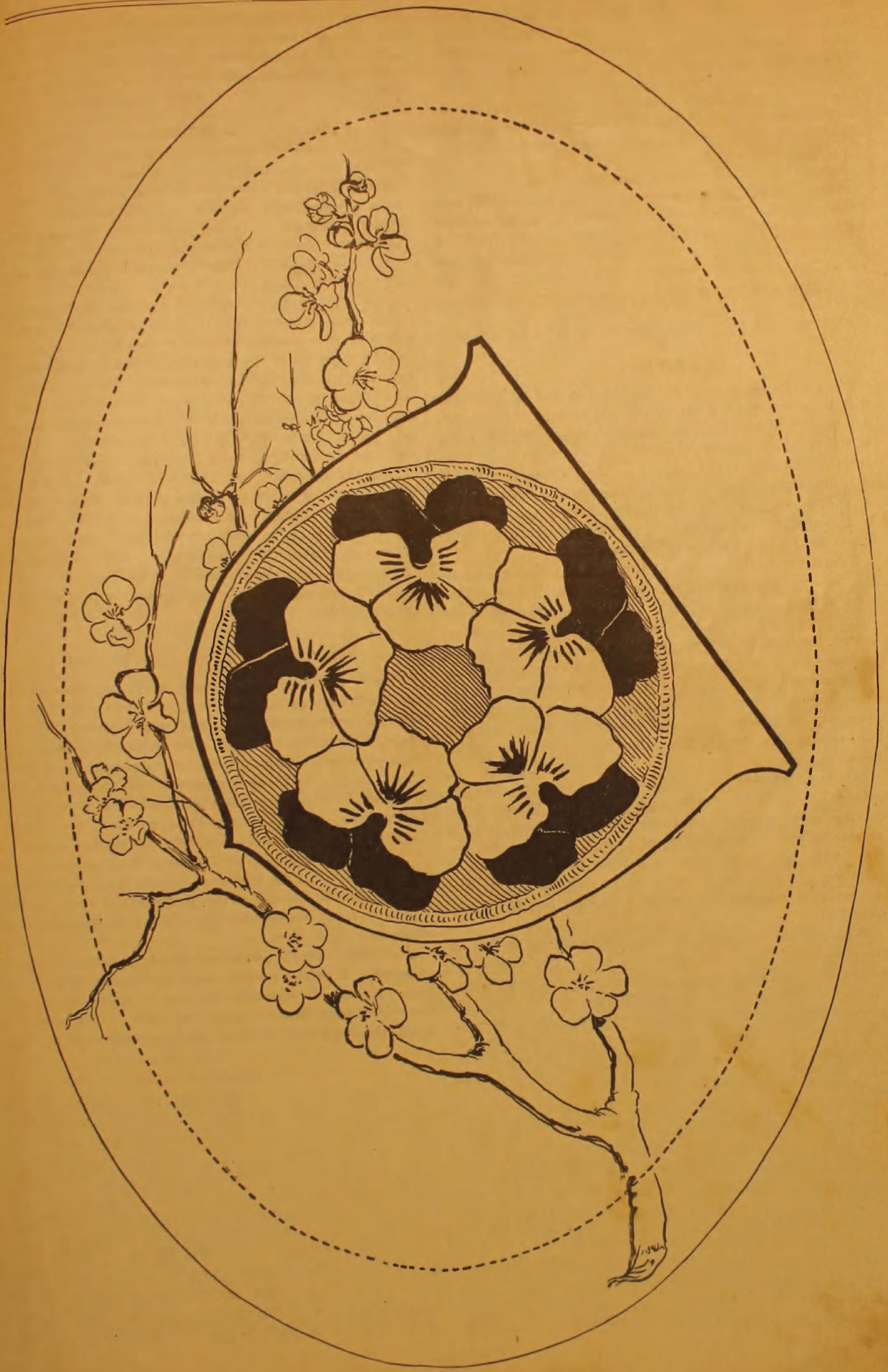
Begin by tracing your original design. To do this, lay the print or drawing to be traced upon a smooth, flat surface, as a drawing-board or an ironing-board, place over it a piece of tracing-paper large enough to cover the design, and fasten them both smoothly to the board with thumb-tacks. Now go over all the lines, all of which can be very readily seen through the paper, with a fine Gillott's pen, using liquid India-ink for the purpose. A tracing in pencil, such as is generally used, is apt to be faint and illegible in parts, especially when used with transfer-paper. Prepare your own transfer-paper. Take some tissue-paper and thickly cover one side of it with carelessly made pencil-marks from a very soft pencil (a cheap one will do). Place the transfer-paper, blackened side down, on the plaque or dish you propose to paint upon, and over this place your tracing; fasten it to the china with gummed strips of paper, and go over all the lines with a hard pencil well sharpened. Another method is to blacken in a similar manner the other surface of the tracing-paper from that traced upon, and omit the transfer-paper altogether.

It must not be forgotten, however, that the surface of the china has to be prepared before attempting to trace upon it. This is done by first washing it thoroughly with Castile soap and warm water, then going over it with a rag or large brush dipped in turpentine, which latter, when allowed to dry, forms a film that takes the lines. Indeed, it is sometimes better to give the china two or three coatings of the turpentine, allowing each one to dry before the next is applied. Some writers on the subject recommend alcohol for the purpose; but I have never succeeded with it.

It is also necessary to be careful in placing the tracing: to do this properly the center of the piece to be decorated must be found. Lay the plate, face downward, upon a smooth piece of yellow wrapping-paper, go around the edge, marking the outline of the china upon the paper; cut this out and fold it so that the two opposite edges correspond, then fold it at right angles, and when the paper is opened the intersection of the creases will mark the true center; mark this upon your tracing-paper, as well as the outline of the plate, and it will enable you to successfully adjust the tracing upon the china.

After your design is nicely transferred to the piece of china, it is necessary to fix it with something more permanent than the easily erased pencil-marks. This can now be done with a fine brush or a pen, and India ink in which has been infused a little ox-gall: the ink disappears in the firing.

Spirits of turpentine is used in china painting as water in



DESIGN FOR A PLATTER.—"SPRING."

water-color painting, or oil in oil painting, and the brush used in painting should always be wet with turpentine before being dipped in color. If a false line be made with the color, the sharpened end of the brush, covered with a bit of rag dipped either in alcohol or turpentine, will remove it. Any required depth of color is attained by successive thin washes of the required pigment, care being taken to allow each wash to dry thoroughly before the next is applied.

In painting, either the leaf attached to the table or the hand-rest, or bridge, before mentioned, can be used: the latter stands upon the table so as to bridge over the piece that is being painted, and may be moved about as required. Have by you a separate piece of china upon which to try your colors: this may be a broken or damaged dish. The one secret that secures success in china painting is, Never go over the same place unless the color previously placed upon it is thoroughly dry. Keep your brush full and flowing.

Grounding.

The design on page 493, "Spring," is one of four that will be given with these articles, typical of the seasons. Any portion of any of these designs can be omitted, according to individual taste, and if smaller pieces are to be painted, parts of the designs can be used; as, for example, a pansy or a single peach-blossom or a branch from the design given would be very effective for butter-plates, or either might be repeated, with regular or irregular intervals. Opportunity for individuality is thus afforded.

Grounding has reference to the ground-coloring, or tinting, of the whole piece, or the background upon which your design is to be placed. Grounding, though quite simple and easy when the knack of doing it is once acquired, may be found to present more difficulties than a beginner cares to contend with, in which case it can be entirely omitted, and the effect will yet be satisfactory. For those, however, who have the patience and natural aptitude necessary for success in the process which much enriches and refines the design, the following instructions will be found useful.

Mix your selected color (which for the grounding of the present design is one-fourth deep purple and three-fourths mixing yellow) with about one-third flux, then with a palette-knife rub down this mixture thoroughly, on the slab, with oil of lavender, in proportion to the depth of color required, for the oil of lavender determines this, and is here used instead of turpentine because it does not dry so quickly.

With a clean, flat brush, of a size proportioned to that of the piece to be painted, dipped first into a cup containing turpentine, then pressed against the sides to discharge superfluous moisture, and then thoroughly charged with the color, proceed with your tinting, upon the surface of the china outside the shield. First try the brush on your spare piece of china until you have the color, which must be well mixed with the palette knife before using, and flow evenly and well.

The brush-marks should be given circularly, going around the plate with short, uniform strokes, each circle bringing you nearer the center of the plate. Do not go over the strokes again before they are dry, in hopes of remedying the irregularity of your tint: work as quickly as you can, and leave it to the dabber to do the rest. Remember that darker shades are made by repeated washes of pigment, so do not attempt depth of color at once.

When you have covered the space outside of the shield, with a bit of rag wipe the edges where the color has overrun on the shield. Try the surface in a little time with your finger-tip, and when it becomes "tacky," or so nearly dry as not to be wet, but sticky, with your dabber give smart, light taps on the surface, beginning where the color was first laid, and tapping oftenest and heaviest where the color is thickest, until you have an even tint. The grounding is carried completely over the design outside the shield: the India-ink pen-marks can be easily seen through the color.

Having obtained a moderately flat and even tint of color over the china outside of the shield, allow it to dry: this will take perhaps half an hour, at most. Do not attempt to hasten the process with artificial heat: in your inexperience you may break the china. When the grounding tint has thoroughly dried, with a bit of rag wet with turpentine, and tied on the end of a pointed stick, go over and take out all the color that has overrun the edges or splashed over the outlines of the shield.

Take grass green well mixed with a touch of light blue for the background where the shield is shaded with lines, and proceed as you did with the grounding tint outside the shield; then paint the rest of the shield light carmine. Before proceeding further, go over all the spaces between the outlines of the design with a rag wet in turpentine, to clean away the grounding colors. For the pansies, use jonquil yellow for the light petals, and one wash of violet of gold for the markings; and use violet of gold, a number of successive washes, for the dark petals. The peach-blossoms are to be painted with a wash of light carmine with a little mixing yellow mixed with it. The branches and twigs are to be light brown. Now finish by going over all the India-ink marks carefully with a fine brush or a pen charged with dark brown.

After your colors are thoroughly dry, your piece will be ready for firing.

Spatter-work or Spraying on China.

This is easily done and has a beautiful effect. Laces, skeleton leaves, and delicate ferns and grasses are extremely beautiful reproduced in this way, and patterns cut out of paper, silhouettes, etc., are also available. Pass a soft brush charged with gum-water over the article to be reproduced, enough to make it adhere to the china for a little while, and when the article thus fastened is quite dry, the entire surface can be spattered over with any color or combination of colors to suit the fancy of the artist.

Prepare your pigment as for grounding, but do not use so much oil. Cut the bristles of a tooth-brush to half their length, dip the bristles in the prepared color, and holding the tooth-brush directly over the article to be decorated, drag it across a nail or a comb.

A still finer effect is produced by spraying with an ordinary atomizer. In this case the color, sufficiently diluted with thin turpentine, is introduced into the bulb and sprayed over the design fastened upon the piece. After the color dries, the designs gummed on can be removed.

Striping.

It is better, perhaps, to leave this part of the work to a professional: orders for striping can be given when the piece is sent to be fired, and the work done there. If, however, anyone should care to try it, they must provide a small circular stand, revolving freely on an iron pivot, with clamps (as is shown in No. 3) to hold the piece firmly in position, while, with a steady hand, the lining-brush is held so that it draws a clean even stripe as the vase or cup turns with the wheel. The wheel has three equidistant grooves in which chucks (as seen in 3a) work backward and forward. They are fastened by screws so as to remain in any place in the grooves, to accommodate the size of the article to be painted, and hold it firmly in position.

The wheel rests upon an upright iron rod which works freely upon a point fitting in a socket on the upper end of a support that can be moved up and down in a hollow wooden envelope, or box (fastened to the table), so as to raise or lower the circular table at will, and secured by a nut on a projecting screw.

Hints.

Colors with an iron base should be mixed only with iron colors. Carmines should be applied in thin washes. The popular idea of the changes of color that take place in firing is an exaggeration of the truth, which is, that while they preserve their relation to each other, they lose strength, and must therefore be used darker than they are meant to appear after firing. The names on the tubes indicate, not the color as you use it, but as it will appear after firing.

Spatter-work or spraying is very pretty either for dark or light backgrounds. If your work looks mottled or a little uneven it is not objectionable, for it gives the idea of hand-work in contradistinction to machine-work.

Wash your brushes well after using. Once neglecting this ruins them. Dip them first in turpentine, then wash them in alcohol, and afterwards wash them thoroughly in warm water and Castile soap.

In almost, or all, the cities and towns in the United States there are kilns where your work can be fired. The dealer from whom you obtain your colors can give any information you may wish in this respect. Small portable kilns are furnished by all the large dealers, together with printed instructions for their use; so that if you choose to do your own firing you can purchase all necessary requisites for doing so.

J. Carter Beard.

Sanitarian.

Thirst.

It would be a serious error to suppose thirst to be a purely local sensation, having its seat in the mouth and throat. Thirst is an internal sensation, having a distressing, almost painful, reaction upon the entire organism, and its real seat is in the central nervous system, that is to say, in the spinal marrow and the brain.

Experiment justifies this view. For instance, an experiment was made upon a dog in a treatment for gastric fistula. An incision was made in the stomach and a small pipe introduced into the stomachal cavity, putting the digestive tube in communication with the air outside. The animal was deprived of water for some days, and its thirst became extremely intense. Then water was set before it, which it drank eagerly; but the pipe was unplugged, and the ingested water flowed out as rapidly: the dog drank and drank incessantly and the water flowed out incessantly, the animal only ceasing to drink when quite exhausted with fatigue, without having quenched its thirst. Then the pipe was stopped up, and a few swallows of water, this time retained in the dog's stomach, sufficed to quench its thirst.

Thirst, then, is allied to a certain state of the blood and the tissues, characterized by the diminution of water. Like hunger, thirst is an alarm-signal of the threatened economy. Water, as we know, is necessary to the constitution of the animal machine, as well as to the proper action of its mechanism. Water composes two-thirds of the material of the body, and it performs, besides, a considerable part in the accomplishment of several important functions.

Without water, digestion is impossible; for, in order that absorption may take place, it is necessary that all solids should be first dissolved in water. Water also forms part of the chemical constitution of the saliva, the gastric juice, and of all liquids designed for the accomplishment of digestion. Therefore, since water plays so important a part in the accomplishment of the functions of vitality and in the constitution of the tissues of the corporeal body, it should in all cases retain an invariable proportion therein. As soon as the tissues lose the quantity of water which is necessary to their perfect constitution, the organization is in danger, and thirst warns the individual of the threatened peril.

Thirst, then, is a general sensation: it is simply consciousness of a lack of water in the organism. The ancients understood this point of general physiology, and designated hunger and thirst by the same name of *fames*, which to them signified the necessity of repairing the losses sustained by the body. Thirst seems to have the mouth and throat for its seat, and we localize the sensation in this limited region. This is owing to the special sensibility of the mucous surfaces of the salivary glands, the pharynx, dried in consequence of the diminution of the salivary secretion. In reality, the entire digestive tube and the air-passages are more or less dried on the inside; but the dryness is felt more acutely and distressingly in the throat, and the pain, increased by the passage of air, seems to be situated in the pharynx. Yet it has been proven that it is not necessary to drink in order to quench thirst: water injected into the veins of a thirsty person will cause the sensation of thirst to disappear, as well as the pain in the throat. Shipwrecked persons have been known to avoid thirst by plunging into the sea, as related in the following incident:

"A vessel going from Jamaica to England was shipwrecked, and the crew, having been obliged to take to the boats, very soon suffered for want of water. They dared not drink the sea-water. The captain told them to do as he did, and, plunging into the sea, entirely dressed, found, upon coming out, that their thirst was allayed for some time. Those who laughed at this proceeding grew weaker day by day and very soon perished; but the others, who plunged into the sea several times a day, preserved their lives for nineteen days, when a vessel came by and rescued them."

Thirst is one of the most cruel tortures that man can suffer. Unfortunates who are shipwrecked always suffer more from thirst than hunger, and when the privation from solid food is complicated with that from liquids, death is much more rapid.

Death from cholera may be considered as giving an exact idea of death from thirst. That which dominates the scene in cholera is the great waste of liquids caused by the diarrhetic flux and purgings; from this results a rapid thickening of the blood, accompanied by the most acute thirst. Then the circulation languishes, the secretions become exhausted, and respiration is embarrassed. The stomach fails, the pulse becomes low and indistinguishable, the face grows haggard, the eyes sink in their sockets, the nose shrinks and

grows cold, the voice is shrill, the skin becomes pale, dry, and shrivelled, the nails grow blue, the feet and hands turn purple, the body shrivels and drys up. The individual falls into somnolence, into stupor, and death supervenes.

All the causes which diminish the quantity of water necessary to the constitution of the tissues and the liquids of our bodies, arouse, in consequence, the sensation of thirst: heat, by augmenting perspiration and favoring evaporation at the surface of the skin, and from the lungs; violent exercise, by augmenting the secretion of perspiration.

Certain alimentary substances, salt and sugar especially, develop the sensation of thirst, because they exact, in order to dissolve in the digestive tube, the afflux of a certain quantity of water, which proportionately diminishes the aqueous proportion of the blood.

The thirst of diabetes is explained in the same manner: the sugar abundantly contained in the blood attracts, in order to dissolve it, water from the tissues; this deshydratation produces thirst, with dryness of the throat. Certain diabetics have been known to drink thirty quarts of water in twenty-four hours. Pepper, cayenne, and certain acrid substances, by irritating the stomach and determining an afflux of liquid there, cause the blood to lose a portion of its water: hence thirst.

Using the throat in speech is another cause of thirst; but here we must make a distinction. The orator mounting the rostrum—and it is even said that this is one of the signs of the true orator—experiences a preparatory emotion which puts his mouth, his tongue, and his throat, in a singular state of dryness. At this moment anguish is extreme, the heart leaps and palpitates, respiration is labored, all the vital functions seem to be suspended, and thought is paralyzed. The orator would almost escape if he dared. But silence is established, and he must speak. Horrors! his throat is dry, his tongue cleaves to the roof of his mouth, and without the help of a glass of water, speech would be impossible: the orator, before speaking, must quench his emotive thirst. This is not, indeed, real thirst; it is a purely reflex and momentary dryness of the mucous surface. In a moment the salivary secretion, momentarily suspended under the nervous influence, resumes its duty and renders its humid suppleness to the tongue. In the meantime a simple swallow of water will suffice.

But, besides this factitious thirst, there is a real oratorical thirst, which is kindled by the action of a vehement harangue, causing a copious perspiration and consequent loss of water in the sanguine mass, which a glass of water will restore. This is a real thirst. "On the tribune," says Mme. de Girardin, "one may do without many things. One may do without talent or wit, without ideas; one can even do without memory and repeat the same things continually: but no one can do without a glass of water."

DR. PH. MARECHAL.

Strawberries.

FROM A THERAPEUTIC POINT OF VIEW.

THE strawberry is held in special favor as a table fruit: its good fame is universal, and it is justly considered as a benefit of nature, although the market strawberry is a product of high cultivation.

Agreeable to nearly all tastes, the strawberry is not only eaten as a fruit, but its pulp, of soft nature, passes promptly from vinous to ascetic fermentation, and thus permits its use in the manufacture of tonic beverages, refreshing sirups, ices, *bonbons*, etc.

Strawberries are particularly salutary to those of sanguine or bilious temperaments, to phthisical, anemic, and rheumatic individuals. Linnæus considered that by eating strawberries, morning and evening, attacks of gout might be prevented, and rheumatism cured.

The action of this fruit, from a medical and physiological point of view, has also received the attention of some of the most eminent chemists of our day, especially as concerning the real therapeutic qualities of the strawberry in the case of gout or gravel. The alkaline mineral waters, those of Vichy, for example, and the bicarbonate of soda which these waters contain, are prescribed as remedies for gout and gravel, maladies in which the secretions are very acid—an acidity which the alkaline salts have the property of neutralizing. Strawberries eaten in abundance produce the same effect. This phenomenon can be explained chemically.

Experiment has demonstrated to learned chemists, such as Wœhler, Berzelius, J. B. Dumas, Milon, and Pelouze, that the secretions can be rendered alkaline simply by the ingestion of an abundant quantity of ripe fruit, strawberries, cherries, grapes, etc.

Without an exact knowledge of the chemical nature of red fruits, one is apt to regard them wholly as acid fruits containing oxalic acid, which traverses the system without undergoing any change, or as containing oxalates, which undergo a very slight transformation. But well-ripened red fruits (with the exception of currants) do not contain oxalic acid; however, they contain other organic vegetable acids very decomposable in carbonic acid and in oxide of carbon. These are pectic, malic, tartaric, citric acids, etc. Acetic acid (vinegar) undergoes the same transformation.

These acids in fruits are combined with soda and potash, and cause the production of carbonate of soda and carbonate of potash, alkaline salts which give to the secretions an alkaline reaction.

Some have claimed that lithium, being a known remedial agent in gouty ailments, must be contained in strawberries; but it has been definitely proved that strawberries do not contain lithium, and cannot form carbonate of lithium by their decomposition: nor does it seem reasonable to attribute to the phosphates of the fertilizers, used in the high culture of strawberry plants, the alkaline reaction that strawberries, eaten in abundance, give to the physicial secretions. The action of grapes is identical with that of strawberries, and there are cantons in Switzerland where, for more than thirty years, grape-cures have been established during the month of September, every year, for persons suffering from gout and gravel.

An advantage of secondary order in eating strawberries, which has a value, nevertheless, is that the acidity of their juice whitens the teeth by dissolving the tartar without injuring the enamel. The roots and the leaves of the plants have also valuable qualities, utilized in medicine and perfumery. A decoction of strawberry-leaves has the property of softening the skin and improving the brilliancy of the complexion. One thing is certain: strawberry-leaves heated, dried, and rolled, and mingled with other ingredients, are often sold us under the name of tea. This species of Chinese trickery is not rare in alimentary industry, and it would be well for us if all other falsifications were so harmless.

Nearly every one is aware that the strawberry is in fact a multiple fruit: its pulpy, savory mass is in reality only a seed-bearer, or *gynophore*, incrusted with little seed-vessels which are so many distinct fruits.

G. LE ROY.

THE July number will contain a very interesting paper on "The Symptoms and Treatment of Heart Disease," by Susanna W. Dodds, M. D.

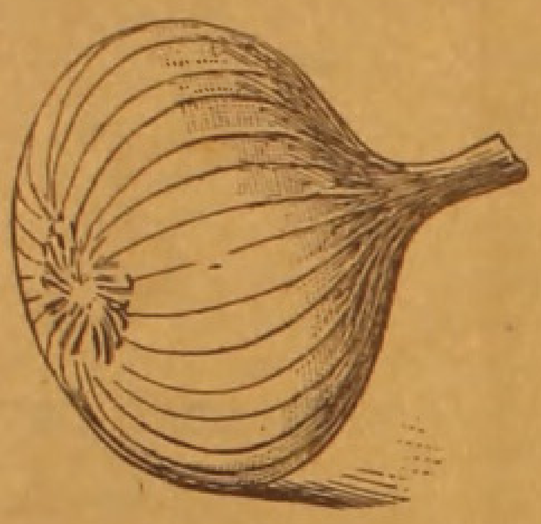
Kindergarten Work and Play for the Home.

XVI.

The Use of Clay—(*Concluded*).

LAST summer we found a new joy in work with the sand and clay, and if the children have been offered every possible opportunity to handle such material, they have experienced a growing pleasure in it during the year, and are now ready for more difficult work.

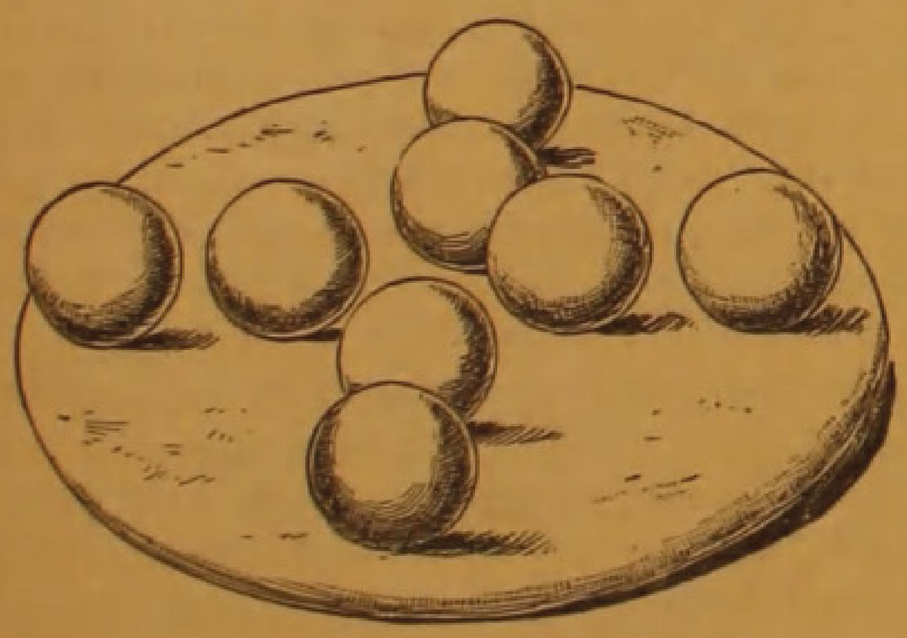
Witness the eagerness with which all children, old and young, seize these opportunities, and it will seem surprising that educators, and thinking people generally, have been so slow to gratify this creative activity. A load of sand is scarcely out of the wagon before a swarm of happy children gather about the pile; the frost hardly out of the ground before some bright eye sees the chance for mud-pies; and in the winter almost the hour that the snow becomes soft enough to pack, you see even boys in their teens at work upon a huge ball, snow man, or fort. The pleasure is more in the construction of the ramparts, too, than in the thought of the mock battle which is to come off, for the boys work longer and harder at the building than they do at the fighting.



1. ONION.

Ah me! we have been so dull! We have not read "the hand-writing on the wall." We have hurried, even our babies, off into the abstract world of books and ideas, while they were divinely impelled to explore objects with their finger-tips,—to be *busy with things*. This is the charm of all plastic material, whether it be snow, mud, clay, sand, wax, putty, rice, bread-crumbs, or dough: the child sees in it a convenient means of self-expression. Through work with it he can see the power of his own thought. And what is more beautiful than "this shaping fancy of children, making everything of nothing, scorning the bounds of probability, and even of possibility"?

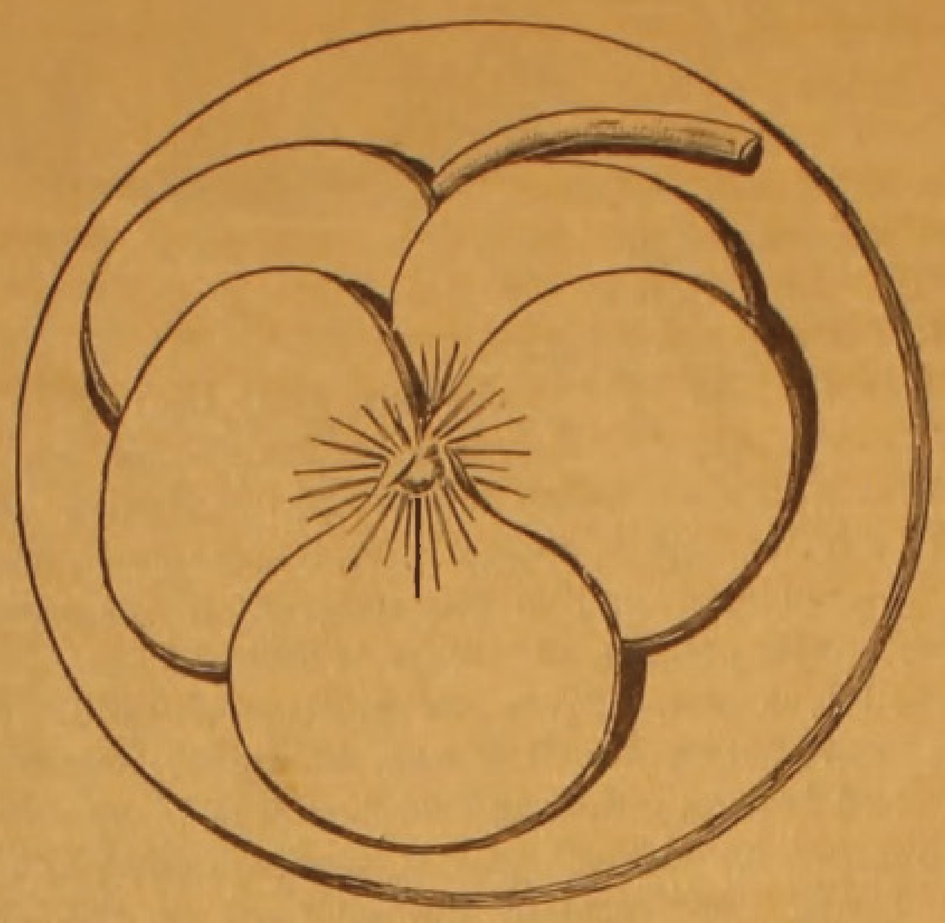
Carl Rutter says, "Wherever our home is, there lie all



2. PLAQUE WITH BALLS.

the materials for the study of the entire globe: the eye may easily be trained to see the greater in the less." This is especially true of substances for modeling: they are in the reach of every little hand.

Potters' clay is the cleanest and most satisfactory of these, though any common clay which is about as soft as putty when ready for use is suitable for modeling. The artists' clay, of a light gray color, used in the kindergartens, is found at some potteries, or at the kindergarten supply-stores, in hard bricks of five pounds each, and also softened ready for immediate use. This prepared clay should be kept in an air-tight jar, closely covered with a thick, wet cloth. Should it become hard and dry, put it in a coarse cloth and soak it in water. While still in the cloth, pound and break it up, so that it can then be kneaded and mixed to the proper consistency. Let the child work upon a piece of oilcloth or a thin



3. PANSY.

board about ten inches square. The fingers are his best tools, and the only ones needed at first.

In Chapter V., in the Magazine for July, 1890, several of the simplest forms—ball, solid cube, and solid cylinder—were illustrated; also an apple, cherries, bird's-nest, etc., made from these, for which no tools were necessary; but in this more advanced work the wooden modeling-tool, made for this, or an ordinary silver fruit-knife will be needed.

From the ball, and the many objects which may be shaped from it, pass to the forms made from the oblate spheroid, the ball flattened. Among the vegetables under this head are the onion (see No. 1), turnip, and radish; of fruits, the tomato, musk-melon, and tangerine are good types; and the tea-pot and sugar-bowl may easily be shaped from this form.

The ball flattened to about a quarter-inch thickness gives the circle, which we make into a watch, plate, dish-cover, or plaque. A variety of interesting changes may be worked upon the plaque. To carry on the study of arrangement, running through all kindergarten work, let the babies place eight small clay balls upon it, as shown in No. 2, or one in the center, then others set closely around the edge of the plaque, thus emphasizing center and circumference. Or to the horizontal and perpendicular lines of No. 2 add balls to

4. OAK-LEAF.

make oblique lines. The three and four leaved clovers are pretty, and these or flowers of five, six, or more petals may be modeled from the real blossom, and placed upon one of these circular tablets of clay. (See the pansy, No. 3).

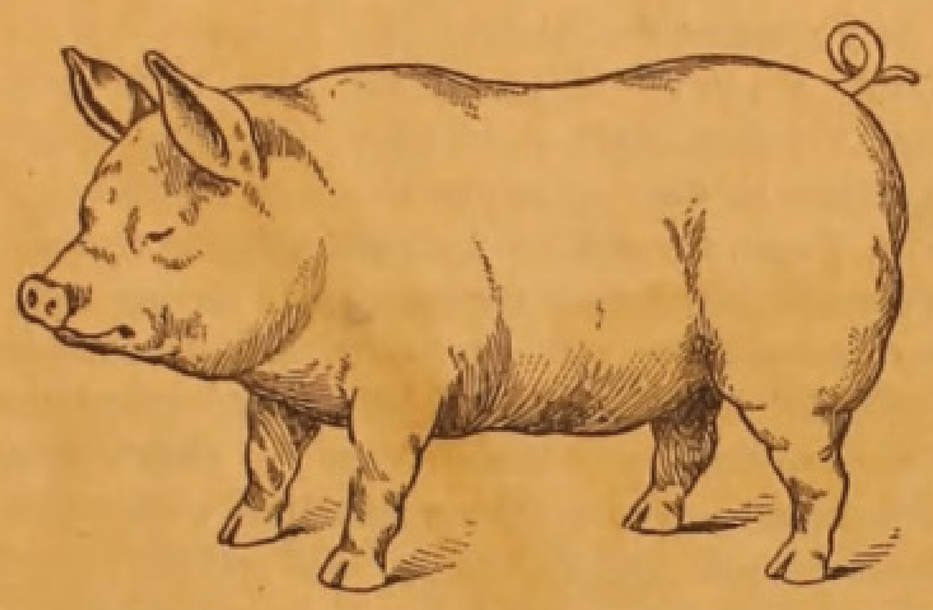
Another fascinating line of work upon these is taking the imprint of leaves. (See the oak-leaf in No. 4.) Have the

clay rather soft for this, and about half an inch thick, press the leaf down carefully, pushing hardest along the rib and veins. When the leaf is well-known, make one of clay and place it upon a plaque, which gives a raised instead of a depressed figure.

5. POTATO.

The children also love to cut out what they call "little capes," from a piece of clay half an inch thick, and then arrange them in some pretty design upon a plaque. These "capes" are the square, oblong, triangle, rhombus, or oval, and are placed according to the demands of symmetry, in a rosette, border pattern, or "form of beauty."

The ball lengthened gives the prolate spheroid. From this shape the potato (No. 5), lemon, cucumber, watermelon, nutmeg, and Malaga grape, and the bodies of many animals, as the pig (No. 6), beaver, squirrel, mouse, rabbit, and dog, can be made. The prolate spheroid cut in the middle lengthwise gives the ellipse, and suggests the mirror, hand-glass, and platter, and tiny ones are the shape of the petals



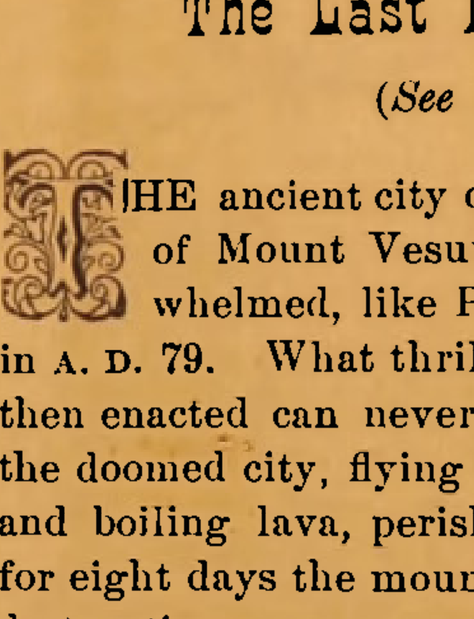
6. PIG.

of many flowers, as the daisy, hepatica, and sunflower. From the ovoid, egg-shape, derive all eggs, and the bodies of all birds and fowls. (See the owl, No. 7.) From the cylinder, get the forms of the hat, muff, spool, bottle, mallet, roller, pump, meat-block, tank, trunk of tree, stove-pipe, barrel (No. 8), worms, and the bodies of all insects.

In all this work have a good model before the child, that he may constantly compare his crude work with the perfect form, and so be getting more and more correct ideas. Give much experience with the fundamental types before passing to irregular forms. Though he cannot make a perfect flower he will surely be impressed with the beauty of his model, and that is what we want. We wish to open his eyes to see and enjoy the harmony and perfection of nature.

In making birds and animals, shape the bodies from the forms named, then add bits of clay for the other parts, slowly shaping them with the fingers and knife.

Try to get honest work from each child, and check the haste to *get through*. Patience and perseverance are the telling qualities here. Good habits are worth infinitely more than any number of results only. All work for children should be only for their own development and growth, and the one guide in the choice of it is the child's own nature. Allow the greatest freedom in the use of clay. The child's sense of power will lead him to attempt anything.

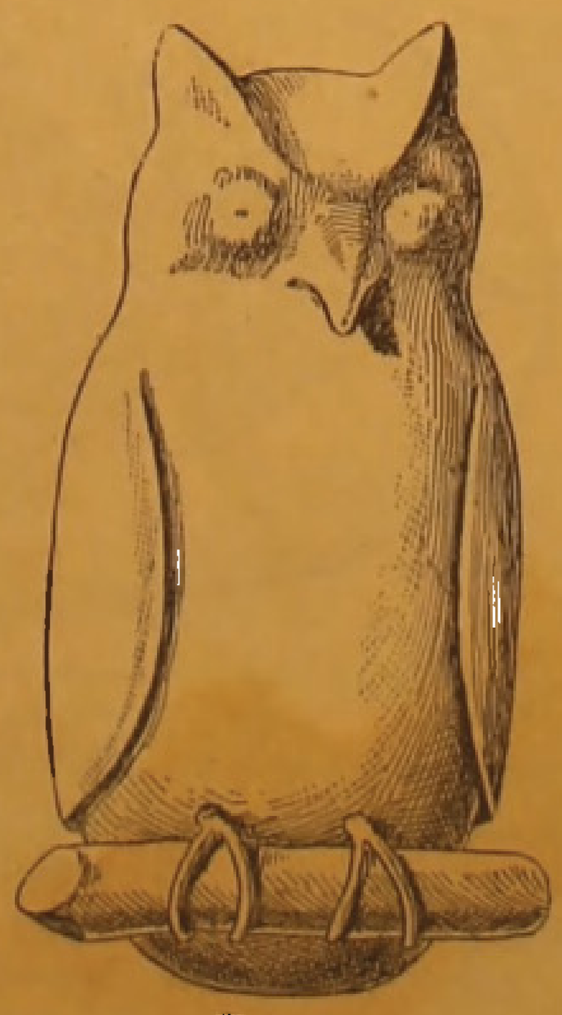


8. BARREL.

One great good in this modeling lies in the connection between the thinking and doing. Knowledge is barren which loses "the general relation between the feeling, thinking, willing, and doing phases of life." It should be applied to some life purpose, and the power to execute should keep close company with the power to criticise.

The carving and coloring of flat clay forms is an interesting department of work, but demands a chapter by itself.

KATE HAWLEY HENNESSEY.



7. OWL.

The Last Day of Herculaneum.

(See Page Engraving.)

THE ancient city of Herculaneum, situated at the base of Mount Vesuvius, in Campania, Italy, was overwhelmed, like Pompeii, by an eruption of Vesuvius, in A. D. 79. What thrilling scenes of terror and agony were then enacted can never be portrayed. The inhabitants of the doomed city, flying from the showers of blazing ashes and boiling lava, perished miserably in their flight, while for eight days the mountain of fire belched forth flame and destruction.

Our beautiful engraving, from a painting by the great French artist, Hector Le Roux, shows us a last solemn and awful moment before the final destruction of the city. The artist has represented the last day of Herculaneum in a most interesting and poetical manner. The young Italian virgins have fled to the hills and are grouped in various attitudes expressive of their emotions. The noble and dignified priestesses, the three central figures, are almost overcome with the conflict between fear and courage, yet they maintain a forced composure even amid this awful falling of all things into chaos. The women below are their accompanying sisterhood of vestals. Le Roux has painted many exquisite pictures in a similar style, and has been medaled again and again by the French government, and decorated for his beautiful works, many of which have been taken for the government and are on exhibition in the various museums of France.

Do you want a

HANDSOME SET OF LAWN TENNIS OR CROQUET FREE? See page 530.

SUMMER is coming, and you must have an Oil-Stove. No house should be without one, either to use for all the cooking, or to make the tea when the fire has gone out.

See page 530 to learn how to get an Oil-Stove FREE, or at very little cost.

Artistic Notes.

The use of white frames has a limit, and that limit is reached when the white frame interferes with the effect of the picture it protects. White frames should not be hung against white walls, because the result is an inevitable ghastly glare, bad for the eyes and therefore tiring to the nerves. A good way to harmonize both possessions is to have a plain thin piece of wood from two to six inches larger all around than the white picture-frame, gild the part of the front that will extend beyond the frame, using gold bronze, such as comes in powder mixed with lump gum arabic and water, and against this golden ground, which can be hung to the wall with picture wire, hang your white frame. Gold is sure to harmonize with everything in the room.

A German frame nearly a hundred years old, made for a pastel picture, is of ebonized wood, with circular pieces of brass in the corners. Bamboo, seemingly cut in halves, as wide as your wrist, forms a very good frame for some pictures.

A pretty wall for a school-room was planned in a country place where several neighbors united in paying one highly cultured teacher a good salary, and one gentleman furnished the school-house. There was no plaster-of-Paris finish, but the rough mortar was left and "spattered" with fine black spots in the same way that "spattered" ivy-leaves were figured on linen some years ago. The color was mixed liberally thin, and with a large comb and tooth-brush was by quick motions spattered on the wall. Lamp-black is cheap,—bought in powder very cheap. If not to be had in a near store, it can be made by holding a caudle under a plate. This should be mixed with oil and ground fine. The whole effect is a dark gray—very restful to the eyes. The effect of sunshine shining through white blinds on white walls is to stir every nerve in a boy's body into perpetual motion. With every moving ray of light his attention is distracted from study. This rough gray wall has economy besides healthy restfulness to recommend it; and if builders of school-houses will act on the testimony of artists, they will not condemn children to sit six hours a day surrounded by white walls.

There are often good reasons why walls must be white. In such case, banners of soft-hued stuffs may very properly be hung against the wall, and will be restful to the eye.

The panel of purple velvet on which was painted the purple clematis for which a prize was received by Miss Stephens, of Washington, D. C., awarded by Sir John Everett Millais, R. A., H. Boughton, R. A., and Marcus Stone, who acted as judges for Raphael Tuck, in London, at a competitive exhibition of art students and amateurs, was the result of many drawings from the plant and blossom. There were spaces left, graceful in shape. The forms of these spaces were not repeated,—in fact, there was no repetition in any part of the panel design. The flowers and leaves were natural size, and the coloring was naturalistic. The utmost was made of the mellowing touch of time turning the leaves yellow.

The time is approaching when it will be just as much a matter of personal mortification to violate the rules of decoration, which Owen Jones, the architect of the first World's Fair in London, called the "Grammar of Ornament," as it is now to speak ungrammatically. The time has past when a thistle and a rose and a shamrock can grow out of one stem and not be ridiculous.

A very feminine decoration was thought of by a poet in New York lately for a luncheon given to some gifted women. Ribbons a yard long, varying in hue to harmonize with the complexion of her guests, were chosen, and arranged in either bows or knots, according to the size of the lady who was expected to wear the ribbon at the festivity. Two lines of an original characteristically complimentary verse were illuminated on each of the two ends of the three-finger-wide ribbon. Few are born poets; but many verses from well-known authors could be selected for such a purpose. Thought judiciously expended is always a compliment, conferring pleasure on both giver and receiver. There are many people who will not accept invitations where the "favors" are apt to be expensive presents.

The lettering was done with gold and silver powder "bronze" mixed with gum arabic and water, and a fine-pointed sable brush. The pale blue ribbon had silver letters, the rich red ribbon, gold. The words were spaced wide enough apart so as to be unmistakable. If you are a novice in lettering, choose *gros-grain* ribbon, and with a few white stitches stretch it on white pasteboard. Let the longitudinal lines of the ribbon help you to keep the letters straight. Four white basting lines of white cotton stitches will serve to keep your letters of the right height. Illumination on silken textures should never be attempted with the small lettering that may be done with good effect on Bristol board or vellum. Silken fabrics having a beauty of their own in catching the light and holding color beautifully, and it is not true taste to ignore that beauty; therefore leave more space between the letters on a ribbon than you would on paper.

The American artist Waldo was once very much amused at hearing, in the National Academy of Design, the sharp criticisms of a group of girlish art-students from the School of Design for Women, which then had temporary quarters in the Bible House. Peter Cooper had promised Mary M. Hamilton, the most executive of the Lady Managers of that pioneer school, a place in the brownstone building now known all over as the Cooper Institute, but then far from finished. Waldo sent to Mary M. Hamilton an invitation for the students to come to his house to see his pictures and studio; then he entertained them with an account of his studies at the Royal Academy, London. The President of the Royal Academy at that time was Sir Benjamin West, who took a deep interest in the American students in London, partly because he was born an American citizen, and partly because he knew that talented children in this country did not have the same advantages as European children in the development of their artistic talent. So the small American colony of students one day treated the President to their opinion of the pictures in the Royal Academy Exhibition. Sir Benjamin West simply listened, and at the end invited Waldo to dinner the next week. After dinner the President called his attention to some small Swiss wood-carvings. Patiently Sir Benjamin West pointed out the graceful lines of the carving, persistently he called Waldo's attention to some attempt at giving the characteristics of nature. "'The first lesson for a man of taste is to learn what to admire: any savage can find fault. And never forget, it is the peculiar province of the artist to see, to point out, and to perpetuate beauty,' said the President of the Royal Academy impressively. After that," continued Mr. Waldo, "I was very careful in a picture gallery. If I liked a painting I said so: if I did not admire a picture I went to the next."

The girlish students glanced at each other: they understood the courteous lesson. Some, at least, of that group have never forgotten that flippant fault-finding is not art-criticism. Waldo, years ago, used to be associated with an artist named Jewett, and they signed their work "Waldo and Jewett."

In the Gallery of the Historical Society in New York City hangs a small Correggio presented by Waldo, that is worth a visit. Our American artist saw it, smoky and begrimed, in a second-hand furniture-store, bought it, and had it cleaned. He arranged the strongest light to fall on this most precious possession in his studio.

Colors prepared with substances authorized by the Council of Public Hygiene and Salubrity, Paris, France, are sold for the use of children in this country for $1.50 a box containing eighteen cakes of paint, a palette like a silicate slate in substance, and four small saucers. These are about the best of this kind of paints, and may be safely given to a child of three for amusement. As a usual thing, the paints sold as non-poisonous for the use of children are tinted trash. Three good colors of a good maker,—red, blue, and yellow,—a large plate, and a large brush with a fine point, will answer for an artistic present to a friend's child. It will really give more pleasure because the child will find out that other colors can be made by mixing those he has. Crimson lake, Prussian blue, and gamboge are the special transparent red, blue, and yellow. A couple of pretty small cups, one for clean water and one to wash the brush in, and a sponge, a piece of white blotting-paper, and a soft white cotton rag will remove the chance of the child putting the brush in his mouth.

ALICE DONLEVY,
Of the "Ladies' Art Association."

The World's Progress.

CURRENT TOPICS, NOTES AND COMMENTS ON EVENTS OF THE DAY.—INTERESTING SUBJECTS AND NOTABLE THINGS WHICH HAVE OCCURRED DURING THE PAST MONTH.—CONTEMPORANEOUS HISTORY FROM A FAMILIAR POINT OF VIEW.

Ocean Postal-Service.

All the mail steamers of the North German Lloyd and the Hamburg-American companies will hereafter bring the mails from Northern Europe assorted and made up ready for immediate distribution, and the mails from America for Germany and Northern Europe will be handled in the same manner. This plan of sorting and preparing the mails at sea saves six hours' time in the delivery, and much hurried labor. Formerly the New York City post-office received, besides its own mail, five sacks of mail matter known as the "closed mail." These sacks were labeled San Francisco, Chicago, New York, Philadelphia, and Boston, and were made up in Bremen for the cities named, although by no means containing all the mail for those cities. This was the only mail-matter which did not have to be handled and assorted in the New York post-office. By means of the ocean postal-service, however, an immense saving of time will be accomplished at both ends of the trans-Atlantic system. The postal department on board a German mail-steamer consists of two rooms; an assorting room, about twice the size of a double state-room, and a still larger room used as a store-room. In the assorting-room, beside the mail-boxes, are the berths of the two "post secretaries." The letter-boxes are arranged about the room on three sides, and are slightly tilted to prevent the contents from sliding out. The boxes are uniform in size (about 10x8x8 inches) and each is labeled with the name of a city or State. A long, folding table is placed just below the tier of compartments on one side of the room, which is lighted by electricity and also by the usual port-holes. The mail is received in the store-room through a chute from the deck, and the bags are piled behind iron bars which hold them in place. The usual German mail contains about eighty thousand letters, and is made up by the ocean post in sections corresponding to the branch offices. The new system is reported by Postmaster Van Cott to work beautifully, the German mail going on the street fifteen minutes after being received at the post-office.

New Silver Coins.

It is a matter of congratulation that the Director of the Mint, Mr. Leech, has taken action under the recent act of Congress providing for new designs of our coins, and has sent out a circular letter to artists asking them to submit designs for both the obverse and reverse of the standard silver dollar, and separate designs for the face of the half-dollar, quarter-dollar, and dime. It has been frequently said, by those competent to judge, that the silver coins now current are atrocious, artistically speaking, and that their designs are a reflection upon the civilization of this country. The circular sent out is addressed to artists generally, but the designs will be confined to models or medallions in plaster, in low relief, and with no other inscriptions than are authorized by law. For the dollar, the words "Liberty," and "United States of America," and the figure of our eagle upon the reverse side are obligatory. Upon the face of the other three coins must be an impression emblematic of liberty, and an inscription of the word "Liberty." The motto, "In God We Trust," will be preserved. These conditions met, the opportunity of invention is unlimited. A reward of $500, in the nature of compensation, will be paid for each design accepted, five in all. It is hoped that patriotism will stimulate distinguished artists to present designs.

American Tin-Plate.

A summary of authentic information contained in the news department of "Hardware," within the last few months, shows the situation of the new tin-plate industry much more clearly than do the widely conflicting reports which have been published elsewhere. To a certain extent it is true that there is no tin-plate industry in America: neither is there a World's Fair in Chicago. But systematic work is being pushed forward to have the Columbian Quadri-Centennial a reality by a certain time, and several respectable firms and individuals assert positively that they are constructing new works for the manufacture of tin-plate on a large scale, and will begin to make it as soon as the higher duty on this product shall have taken effect this summer. At Cleveland, St. Louis, and Brooklyn, and at several points in Pennsylvania and Illinois, such preparations are in progress. Some of the parties have produced, on a small scale, tin-plate which has met every test. It has been shown that iron and steel plates of the requisite quality can be made in America, and that there is no lack of special skilled labor, many Welsh emigrants having brought with them a knowledge of tin-plate making. As for the tin, it has to be imported by Welsh firms and the United States can avail themselves of the same source of supply. It seems reasonable to suppose that all who engage in the tin-plate industry will try to produce as many tons per year as possible, so as to reap the advantage of the duty, since the new tariff law provides for the repeal of the increased duty within five years, in case it fails to supply the market to a large extent with tin-plate made in America.

Coal in Mexico.

A new coal-field has been discovered in northern Mexico, at San Marcial, Sonora, about sixty miles from Guaymas. For years prospectors have been vainly searching for hard coal on this coast, and now that huge beds of best anthracite coal have been discovered in this most northerly State of Mexico, the Mexican inspector's report would indicate that an immense supply has been found. The coal lies in a valley, eight miles wide by twenty miles long, lying between San Marcial and the Tecoripa Mountains. The vein comes to the surface at the base of the mountains on each side, but suddenly drops downward until it is for the most part from four hundred and seventy to six hundred feet below the surface. The coal formation rests immediately on granite, and bears traces of tremendous volcanic activity such as produced the upheavals which lifted the San Marcial and Tecoripa Mountains. If a subsequent boring proves equal to those already made, a Mexican company will develop the property; and when a railroad is built it is expected that coal can be delivered in San Francisco for $4 a ton.

P. T. Barnum.

With the death of P. T. Barnum ends the most remarkable career any showman, as such, has ever had. He was born in the little town of Bethel, Connecticut, on July 5, 1810, and inherited only poverty and toil. He worked first as clerk in a grocery store, then set up a fruit and confectionery store for himself, and took up, in rapid succession, editing, selling lottery tickets, and keeping a boarding-house. In the summer of 1835 he began his career as a showman by exhibiting a remarkable negro woman, Joyce Heth, who was believed to be the nurse of George Washington. His circus career began in April, 1836, when he connected himself with Turner's traveling show. In 1841 he became the proprietor of the American Museum, which, from the time it fell into the hands of Barnum until it disappeared in flames in 1865, had no rival here nor in Europe. Under Barnum's management the little mite of humanity Charles S. Stratton, announced on the Museum bills as "General Tom Thumb," became one of the celebrated characters of the century, and the richest and most popular of dwarfs. In 1850 Barnum brought out the great cantatrice Jenny Lind, the "Swedish Nightingale," who became the "rage" among all classes of society, and laid the foundation of the great showman's fortune. In the ninety-five concerts that Jenny Lind gave under Barnum's management, the total receipts amounted to the enormous sum of $712,161.34, of which the songstress got as her share $176,675.09. In 1876 the modern era of the railroad circus began, and has proved a financial gold mine; so that although Mr. Barnum lost several fortunes, success finally was his. Mr. Barnum was immensely popular in Bridgeport, where his magnificent residence "Iranistan" was located, and was earnestly devoted to all measures tending to advance the material welfare of Bridgeport. He served several terms in the Connecticut Legislature, and was twice mayor of Bridgeport. He was twice married: on November 8, 1829, to Miss Charity Hallett, of Bethel, Connecticut, who died November 19, 1873, by whom he had several daughters, but no son; and in 1874 to Miss Fish, an English lady. With her he passed the last years of his life at the country-seat "Waldemere," near Bridgeport, his first house having been burned, as many of his other possessions were. The great showman died on April 7; but the "Only Greatest Show on Earth" survives him, and his name will still delight the millions of his little admirers, the children. It would not be fair to so genial a man to omit saying that a love for the little ones was one of his marked characteristics. He was energetic and plucky, but also tender-hearted, public-spirited, benevolent, a good man and a good citizen who will be sincerely mourned and regretted.

Chili's Civil War.

According to latest advices, the revolution in Chili now amounts to a civil war. The most progressive and orderly nation in South America, heretofore, is now torn with intestine conflict as brutal and sanguinary as the old struggles of the native Indians and the Spanish *conquistadores*. President Balmaceda has assumed most despotic functions, and confiscates the property of of all who do not support him. He called on the bank for 11,000,000 *pesos*, the managers refused and were at once thrown into prison. Thus far the revolutionists have won the most of the skirmishes and battles that have occurred, and now control most of the cities of northern Chili. Pisagua, Iquique, Taltai, Autofagasta, and Chaneral are in the hands of the opposition, but the actual situation, from a military standpoint, is difficult to comprehend. The partisans of Balmaceda hold the telegraph lines, and reliable news is hard to get. In accordance with the opinion of legal advisers of the French Foreign Office, the Chilian cruisers built in France will be handed to the government of Balmaceda on condition that no French crews shall be engaged, and that all the assistance the vessels shall get in France will be permission to coal and complete such equipments as they need to reach Chili. British crews have already been engaged. The United States has only the old Tallapoosa as the naval representative of the country in the River Platte. Other news is not entirely reliable; horrible tales of cruelties and sufferings are related, rapine, violence,

a complete overturning of the laws and almost anarchy prevails. The most hated person in the country is Balmaceda, and it is clear that the struggle is between the people and irresponsible power, between law and order and dictatorship.

Tanning by Electricity.

A way to tan leather more expeditiously than by the usual process, which, although simple, is very tedious, requiring months, has long been a sort of philosopher's stone among tanners, for tanning has participated but incompletely in the marvelous march of progress all the industries have been led to form. But now tanning by electricity is really in practice by several more or less successful processes, and has been much discussed among tanners for a year past. The process of the French discoverers, Messrs. Worms and Balé, patented in 1887, is at present operated in tanneries of Paris, London, and Lisbon, and has been tried in some in America. This process consists in tanning the skin, after the hair has been taken off, by means of a special apparatus causing an electric current to pass through them. This apparatus is an immense rotary wooden drum, with a water-tight opening so that the skins can be introduced. It turns around a horizontal axis. Tubes through the axles admit the tanning liquors. Two large copper plates inside form the bases of the drum and constitute the electrodes, and they are put into communication with the poles of a dynamo. From five hundred to a thousand pounds of skins are put into this drum, the door is closed, it is put in rotation, and a current of ten amperes under a tension of seventy volts is made to pass through it, and one or four days afterward, according to the weight of the skins and their relative thinness or thickness, the drum is stopped and the tanned skins taken out. The role which electricity plays in this performance is not very clear. The inventors and operators say that is for the most part in fixing the tannin, and that without the electric current the process would have no good result. The influence of motion has been known for some time, but continual movement has only been found, up to the present time, to be at the expense of the quality of the leather. Competent judges have concluded that leathers tanned by electricity are as good as ordinary leathers.

The First American City.

The first civilized settlement, in America, the city of Isabella, founded by Columbus in 1493, will be exhibited at the World's Columbian Exposition in Chicago. These ruins are situated at Cape Isabella, longitude 71, latitude 19:57, about twenty miles west of Puerto Plata on the coast of San Domingo. William E. Curtis of the Bureau of American Republics has written concerning these ruins to the Secretary of the Navy, and says that those who have visited the place as late as 1883 report the ruins to be in good condition, and that they deem it practicable to move them. He also writes: "The Exposition authorities at Chicago will be glad to pay the expense of the removal of the ruins, and have the honor to request through me that you will be good enough to direct one of the naval vessels in that vicinity to visit the place and make a survey for the purpose of ascertaining what condition the ruins are in; whether their removal is practicable; the best and most economical method of accomplishing it; and whether there is any person at Puerto Plata to whom the work may be entrusted." Secretary Tracy has granted this request, and sent the proper instructions to Admiral Gherardi, in the West Indies.

The Odor of the Earth.

An illustrious French chemist Monsieur Berthelot is at present engaged in seeking the cause of the special odor which mold emits the moment it is moistened, a characteristic odor which is far from disagreeable. The experiments made by M. Berthelot go to prove that the proportion of this product of the soil is very slight, and is only represented by the millionth part. It is a camphorated substance, the complete analysis of which has not brought to light the actual nature of its composition. M. Berthelot has not found in the earth the alcohol which the chemist Muntz announced was present, and which in any case appears to be only an exceptional product of the spontaneous fermentation of vegetable débris. The new odorous substance also has the property of producing iodoform, the same as alcohol; and the trillionth part of a milligramme has a sensible odor.

Modern Hells.

We who enjoy the lovely summer voyage across "blue water," and confide ourselves willingly to the strange genii of steam whose power we invoke to carry us whither we will on errands of business or pleasure, do not often stop to think how this power is realized. Our floating traveling-conveyances consume enormous quantities of coal. The English merchant-service of steamers alone uses fourteen millions of tons yearly, that is to say, one-twelfth of the entire coal product of England. One of the great German war-vessels uses sixty-six hundred weight of coal an hour. The attendants of such a coal-eating monster have an importance not to be overlooked: firemen, or stokers, and coal-carriers are what the steam-genius's slaves are called. Hard work in tropical heat and contracted space is the coal-carrier's lot. Woe to the unfortunate who, unaccustomed to the hard work, must serve as coal-carrier on the trans-Atlantic trip of an ocean steamer: only too often he succumbs to the unaccustomed hardships of the work, and the inhuman treatment of the rough sea-faring men. Consequently such situations are not in demand. Not every one is willing to undergo living torture in one of these modern hells of fire for $3 or $4 per week.

Mr. Ward's Widow.

If the great humorist, the late lamented "Artemus Ward," who died in 1867 at the age of thirty-three, according to the biographers, could express himself on the subject of the alleged widow who claims his estate, we should undoubtedly have some very amusing reading. Hannah Staunton, of Bloomington, Illinois, who claims to have wedded the late Charles Farrar Browne, otherwise "A. Ward," lecturer and humorist, is an old lady of seventy-four, and she declares that she married Mr. Browne in 1835; while all the biographers of the identical individual say that he was born in 1834, and, if all claims be reconciled, must therefore have made Hannah his blushing bride when he was only one year old. Now this, as "A. Ward, showman," would have doubtless remarked, "is quite an eppisode." In spite of his humorous allusions to the supposititious "Betsy Jane of Baldwinsville, Injianny," which the gifted humorist frequently made, it was always supposed that he was a bachelor; and that a youth of twenty-one should manage to raise a family of ten children and desert them, seems, as "A. Ward" would say, "incredulous." However, this is the assertion of Mr. Ward's alleged widow, whose grown-up sons are investigating the case. This widow and her sons have undoubted claims upon a certain Charles F. Browne; but if it should turn out that there was more than one "Artemus Ward" whose real name was Browne or Brown, Shakespeare's "Comedy of Errors" is likely to be surpassed in originality. The situation is as funny as any humorist could imagine.

Some Scientific Definitions.

Lord Salisbury is a distinguished savant, as well as a statesman, and the temptation to repeat three curious scientific definitions, of which he is the author, is irresistible. They were uttered in a discourse before the Chemical Society of London, on the occasion of the jubilee of its foundation. "Astronomy," said Lord Salisbury, "is, in a great measure, the science of things as they probably are; geology is the science of things as they probably were; chemistry is the science of things as they are at present." To these "The Electrical Engineer," from whom we borrow the above quotation, adds, "electricity is the science of things as they probably will be."

Phagocytes.

A most extraordinary and interesting fact which recent research has disclosed is the power possessed by the white blood-globules of living animals to attack and devour the disease-germs which have gained entrance to the living tissues. There are two sets of corpuscles in the blood: red and white. The white corpuscles, or *phagocytes*, as they are now called, are believed by the great scientist Metschnikoff to have the property and power of destroying microbes. The white cells (*phagocytes*) are living protoplasms, and are semi-independent. They are able to wriggle their way through the walls of blood-vessels, and to pass at will among the body's tissues. There is no doubt that these curious cells seize upon noxious substances and consume them. They have been seen attacking bacteria and bacilli, and appear to be a sanitary corps. Therefore when we succumb to disease it is because our *phagocytes* have been defeated by the invading germs; and when we recover from a disease it is because the white blood-cells have conquered the microbes. The practical aim of life would therefore seem to be that of reinforcing the *phagocytes*. How this is to done, other than by maintaining a high state of general health, is not quite clear; but it is certain that the *phagocytes* are in good fighting trim when the health is good.

The Kingdom of Sheba.

The recent conflicts of the English and Portuguese on the south-east coast of Africa, gives present interest to a very curious hypothesis, according to which the back country (*Hinterland*, as the Germans call it) of Mashonaland can be no other than the famous kingdom of Ophir, from which the Queen of Sheba, according to the Bible account, sent ships by the Red Sea, bearing to King Solomon, the magnificent offering of four hundred and twenty gold talents, something like sixteen millions of our money. Not only the name, Sofala, which is that of a port down the bay opposite Madagascar, and appears a simple derivative of Ophir, with the addition of the prefix S, not only the abundance of gold in the possession of the natives, which has always been reported, but that which has more especially struck travelers is the existence, in several places, of ruins such as have never been found in any other part of the Dark Continent, and of which it seems impossible that the autochthonous race could have been the architects. The explorers, Carl Mauch, G. A. Farini, and G. C. Dawnay, have all been seized with astonishment before these unexpected appearances of vestiges of vast enclosures constructed of pieces of granite regularly cut and sometimes cemented, which cannot, like certain ruined towers or certain dams, be attributed to the early Portuguese explorers and gold-washers of four centuries ago. It appears evident, however, by their aspect of defensive works, compared by Mr. J. M. Stuart to those of the Aztec ruins of Mexico, that they must have been erected by a conquering race come from without, and obliged to maintain its dominion by force. Could it have been one of the great commercial powers of the world of the ancients,—Babylonians, Hebrews, Phenicians, or Egyptians? No one can decide the question; but, according to Mr. O. Neil, former English consul at Mozambique, all seems to militate in favor of the hypothesis of the ancient kingdom of Ophir.

Chat.

A FLOWER DINNER, given in May, was a unique idea most beautifully carried out. The guests numbered fourteen, making, with the host and hostess (a young couple giving their first entertainment in their new home), sixteen diners, who were seated at four small round tables, each decorated with a special flower—roses, tulips, forget-me-nots, and lily of the valley, respectively. Small bouquets and *boutonnières* of trailing arbutus—the language of which is "welcome"—were presented to the guests on arrival.

The first table was all pink-and-white, the cloth white damask in a rosebud pattern, with an embroidered border of pink roses above a deep fringe. In the center was a wreath of pink roses, with foliage, surrounding a rather high silver bowl overflowing with roses of the same tint, and scattered over the table, in an artistically careless manner, were long-stemmed pink roses. The dessert service was white with rosebud decorations, and the souvenirs for the ladies were small pink velvet boxes, each holding a small after-dinner-coffee spoon, and for the gentlemen, scarf-pins with enameled rosebud heads.

At the tulip table the cloth was white linen with elaborate drawnwork through which could be seen the yellow satin beneath. In the center was a cut-glass bowl holding yellow tulips surrounded by a border of maidenhair fern, and from the center to the edges of the table were four sashes of yellow satin ribbon, each terminating in a bow. The service was all white-and-gold, and the souvenirs were gold-bowled orange-spoons in yellow velvet boxes, for the ladies, and old-gold scarf-pins, for the gentlemen.

The third table was all blue-and-white, forget-me-nots in a jar of white porcelain forming the central ornament on a white cloth with an embroidered border of forget-me-nots, and a half-wreath of natural forget-me-nots was about each plate, while sprays were scattered carelessly about. Small photos of the young host and hostess, both in one frame, of white wood painted with forget-me-nots, were the ladies' souvenirs, and those for the gentlemen were pins with enameled forget-me-not heads.

At the fourth table a clear crystal jar was filled with sprays of lily of the valley, the stems showing plainly through the delicate glass. Around this was a wreath of asparagus vine, from which radiated sprays, or irregular lengths, of the same vine, producing a beautiful effect on the pure white damask cloth. In pale green velvet boxes were enameled silver pins representing a spray of lily of the valley for the ladies, and the gentlemen received scarf-pins to match.

* * * * * * *

THE subtle, penetrating, altogether delightful fragrance of the violet is the perfume most favored by fashion at present, not only for women, but for "the sterner sex" as well, who are indulging in the use of perfumes to an extent never before equaled—the natural sequence of the habitual wearing of a *boutonnière*, which, even if it be only a single modest violet, is considered a matter of course with any style of costume. The use of a strong scent indicates a lack of culture and refinement: the chosen odor must be faint and delicate, preferably of a flower, and must permeate all one's belongings, imparting to them a sort of individuality. Many have discarded liquid perfumes altogether, using instead sachets containing powder scented with the favorite odor, which are placed in wardrobes and bureau drawers, among all the clothing, even the bonnets, gloves, and shoes, and with the stationery; and some ladies have the sofa-pillows and head-rests in their private apartments similarly scented.

* * * * * * *

A UNIQUE FEATURE at a recent wedding where there were six bridesmaids and six ushers was their entrance from the vestry-room, whence they walked slowly down the main aisle, the bridesmaids in pairs in advance, and received the bridal party consisting of a maid of honor, the bride and her father, and the bride's young twin-brothers, who were dressed as pages. Preceded by the ushers, the party then passed up the aisle, the bridegroom meeting the bride at the chancel.

What Women are Doing.

The Portia Club of Boston is composed of lady lawyers.

Miss Emma Steiner is the only woman operatic conductor in America.

Mrs. Henry M. Stanley is a direct descendant, the seventh in line, from Oliver Cromwell.

Mrs. Harrison, otherwise "Lucas Malet," the novelist, is the daughter of Charles Kingsley.

Princess Beatrice prefers to be addressed, spoken of, and written about, as Princess Henry of Battenberg.

Californian school-girls are making a collection of wild-flowers of their State to appear at the World's Fair.

Miss Aimee Rapin is an armless Swiss artist who is beginning to achieve fame. She paints with her toes.

Mrs. Helen Campbell has been awarded the prize of $200 offered by the American Economic Association for the best paper on "Women Wage-Earners."

Mrs. C. W. Haney, of Belfast, Maine, is proprietor and manager of a large business house dealing in men's clothing and furnishing goods.

Mrs. Dimick, a sister of Mrs. Harrison, draws a salary of one hundred dollars a month from the Government, as housekeeper at the White House.

Mrs. Grover Cleveland is said to be a liberal purchaser of rare books. She has a passion for unique bindings, and knows a genuine article from an imitation.

Mrs. Alexander Bremer, one of the deputy factory inspectors of New York, knows as much about machinery, elevators, and ventilating shafts, heating, plumbing apparatus, and sanitary improvements, as any man on the force.

Mary E. Dewey, of Goshen, Indiana, served through the Civil War disguised as a man, in the Twenty-sixth Ohio Regiment, under the *alias* of Charles Dewey. She now applies for a pension under her real name.

Miss Mary Helen Carlisle, a girl about twenty years old, has been awarded, for the third year in succession, the medal competed for by art students of both sexes at Julian's School in Paris, for the "Concours" drawings from life.

Frances E. Willard recommends that, in view of the service rendered in helping to pioneer the way for women as public speakers, each woman now in the lecture field devote the proceeds of one lecture to the fund for Miss Anna Dickinson's benefit.

Mrs. Kate Smith is the only woman chief of division in the Government service. In eighteen months she rose from a $600 clerkship to her present position, which has a salary of $1,600. She has charge of the data on mortgages on homes and farms.

Miss Carter, of Wilmington, Massachusetts, has given that town ten thousand dollars, the income of which is to be used, from year to year, in painting houses that may need it, "provided the applicant does not own a dog and is a member of some temperance organization."

Dr. Emma Wygant, a practicing dentist in Peekskill, New York, is an example of what a young woman may do in a branch of surgery requiring so much muscular strength as dentistry. Without seeking for a special career, she grew up in her father's business, and from a skillful assistant developed naturally into a successful dentist.

A number of ladies organized a Political Culture Club in Bayonne, New Jersey, and the young men of the place, it is said, met and decided to withdraw all social attentions from any girl who had the temerity to take an interest in politics. The girls, however, are unterrified by the boycott, probably thinking that the social attentions of such extremely silly young men are no very great loss.

Miss Lillian B. Perry, of Covington, Tennessee, has won a prize for the best description of the kind of man to marry, and this is the way she paints her ideal: "If I wished to marry (which, of course, I do not), I would desire a man too noble to commit a mean act, but generous enough to forgive one. A man as gentle as a woman, as manly as a man; one who does not talk scandal nor tell disagreeable truths. A man whose name I would be proud to bear, to whom I could carry my doubts and perplexities, and with whom I would find sympathy and joy."

Household.

And Green Peas.

DINNER in summertime needs to be a lighter, daintier meal than in winter; and when the green herbs, roots, and fruits of the earth are in their perfection, the diet can be much more vegetarian. If one live near the large markets, a continuous supply of fresh green vegetables may be had all summer; but if not, a wise gardener will arrange the sowing of the home crops so as to accomplish the same result.

A crisp roast of lamb with mint sauce, fried chicken, broiled cutlets, and fricassees of lamb, chicken, and veal, are always welcome summer meats, and with green peas and ripe fruit furnish ideal dinners.

Peas lose their sweetness very quickly after picking, and should not be shelled until just before cooking. Probably the greatest mistake in cooking them is in over-boiling. They should be washed quickly in cold water, thrown into a kettle of salted boiling water,—some add a teaspoonful of butter to the water also,—and boiled from ten to twenty minutes. Long boiling cracks the skins and destroys the color and flavor of the peas. The most important point in cooking them is to have sufficient water: at least two quarts of water should be allowed to a quart of shelled peas, and even four quarts is not too much if the peas are large. If peas are old or have been picked some time before cooking, it is very difficult to make them tender: such peas are better used for soup, by passing them through a sieve after cooking. If the taste of mint with peas is liked, boil two or three good-sized sprigs of mint with the peas, removing the mint before serving.

When the peas are boiled, drain off nearly all the water, and season with butter and salt. Canned peas need only to be heated through; but it is generally best to rinse them well with cold water, to remove the resiny flavor sometimes noticeable. Then add one tablespoonful of butter to each pint of peas, season, and shake gently until hot.

The garnishing of green peas, as prepared by the great French *chef*, Felix Deliee, is extremely nice with lamb, veal, chicken, or duck, or any dish to which one wishes to add the captivating words "and green peas." We append the receipt and several other excellent receipts by M. Deliee and others, in which the succulent green pea is prominent.

GARNISHING OF GREEN PEAS.—Remove the rind and cut in small squares six ounces of salt pork, parboil for five minutes, drain, and fry slightly brown in a stew-pan, with an ounce of butter; sprinkle half an ounce of flour over and fry three minutes longer; add three pints of small green peas and a pint of boiling water with a little bunch of parsley and green onion stalks, cover, and cook slowly for half an hour; remove the bunch of parsley and onions, skim off the fat, and season with a little salt and serve.

BREAST OF VEAL AND GREEN PEAS.—Procure about four pounds of the fat white breast of veal; cut it in pieces, put into a stew-pan with three ounces of melted butter, and fry slightly brown; drain most of the butter off, sprinkle an ounce and a half of sifted flour over, mix well, fry a little longer, dilute with a quart of water, stir, and set to boil; then, with the aid of a skimmer and a fork, transfer the pieces of meat into another stew-pan, and strain the sauce over; add a bunch of parsley, three cloves, a little salt and white pepper, nutmeg, and a carrot cut into small pieces; cover and boil half an hour, then add a dozen small onions slightly sugared and browned in butter, and a pint of green peas; boil half an hour longer, remove the parsley and the fat, dish up in pyramid form, pour the sauce and the garnishing over, and serve.

PIGEONS AND GREEN PEAS.—Prepare two pigeons for cooking, put them in a saucepan with a little butter, fry them a few minutes, take them out, and make a little sauce, adding a tablespoonful of flour to the butter in which they were fried, add a pint of stock, the pigeons, a bunch of soup-herbs, also ten small onions fried in about two teaspoonfuls of lard, and let all stew about forty minutes. Take out the pigeons, place them upon a dish with boiled green peas arranged as a garnish around them, skim the fat off the liquor they were stewed in, and moisten with some of it. Serve with slices of lemon.

OMELET AND GREEN PEAS.—Boil one cupful of shelled peas in salted water for fifteen minutes. Drain, and keep hot while you make an omelet. Beat four eggs, add four tablespoonfuls of warm water, a piece of butter the size of a walnut, and put another piece of butter, the same size, in a perfectly smooth frying-pan; when the butter is hot turn in the eggs. Shake over a quick fire till the eggs are set. Lift one side of the omelet, and put two tablespoonfuls of green peas, cooked, in the center of it; fold one half over the other, and turn it out on a heated dish. Pour around the omelet the remaining peas, and serve at once. This makes an exceedingly nice *entrée* for dinner; or if there are cooked peas left from dinner they can be easily prepared for supper or luncheon.

("*Household*" *continued on page* 515.)

What Does your Handwriting Indicate?

WOULD you like to know what your handwriting indicates? or learn how to read the characters of your friends by their penmanship? Then you must surely read the extremely interesting paper that will appear in the July number on "How to Read Character by Handwriting," by Prof. Nelson Thorpe, an acknowledged authority on the subject. Interspersed through the paper will be specimens of all kinds of handwriting, which will be critically analyzed so that comparison will be easy with individual examples.

The style of one's penmanship is as much a part of one's personality as the features; and if character can be read by the size and shape of the nose, the color and expression of the eyes, the shape and movements of the hands, why not from the handwriting?

Summer Outdoor Games up to Date.

AN elaborate article on outdoor games for summer, which will be superbly illustrated, and give such full rules and directions for the most popular games that the veriest novice may in a short time become proficient in any or all of them, will be one of the many attractions of our July number.

Since the advantage and necessity of physical culture has been rightly appreciated, recreations more or less athletic in their character have, naturally, increased in popularity Lawn tennis retains its prestige as the "queen of games," although the lovers of badminton (and they are legion) dispute the right of tennis to that distinction; our old friend croquet is revived, and has many ardent supporters among those who prefer less violent exercise than is afforded by tennis and badminton; and the new "Game of Colors" is still more leisurely in its action, and just the thing for a lawn-party on a hot summer day.

REVIEW OF FASHIONS.—JUNE.

PATTERN ORDER, Entitling holder to a Pattern, will be found at bottom of page 527.

THE revival of quaint old-fashioned muslins, sheer lawns, delicate organdies, pretty batistes, and the corded dimities of our grandmother's time, affords ample material for fashioning charming dresses of that dainty freshness which should be the distinctive characteristic of summer toilets. Floral patterns in natural tints, usually of small size, on a white or cream ground, are preferred for the thinner fabrics, though there are some with large, gaudy-colored blossoms on black and colored grounds, which, while showy and often very becoming, lack the effect of lightness and appropriateness that constitutes the beauty of the more dainty varieties. The dimities are light in quality, with corded stripes, and have colored figures on white or light-tinted grounds ; and the fancy for stripes is gratified in the lawns with stripes in various widths of delicate colors alternating with white.

Lace and ribbon are the accepted garnitures, and for the majority of these lovely dresses the effect, at least, of simplicity is retained ; but when India silk is used for waist lining and foundation skirt for organdie, with a *point d'esprit* flounce on the silk skirt, and *point d'esprit* insertions above the hem in the otherwise plain outside skirt, it must be admitted that it is rather costly simplicity, after all. But a foundation skirt of plain white lawn with a plaiting at the foot serves quite as well as one of lace-trimmed India silk, and fine white silesia is quite good enough for a waist lining, and a plain deep hem at the foot of the outer skirt, with perhaps a cluster of tucks above it, will furnish a pretty finish ; and with a pretty full waist with full sleeves, lace frills at the neck and wrists, and a ribbon belt with long-looped ends, one may have a dainty summer dress, even without India silk for a foundation.

Almost every variety of full waist is made in these thin cotton fabrics, the "Thelma," shown on page 505, being an especial favorite. The collar shown in the illustration is frequently replaced by a frill of finger-deep lace carried around the neck and down both fronts to the waist line, and a ruffle of lace about five inches deep is sewed to the lower edge of the waist in a reversed manner. Sometimes the fronts are crossed in surplice style ; and if a short-waisted effect be desired, a ribbon belt from two to three inches wide is worn, secured by a silver buckle, or ornamented with a *chou* of the same ribbon in front, or a long-looped bow with ends falling to the front of the skirt.

Ribbons are used in great profusion on summer dresses of every description : in the graceful long-looped bows that are always popular, in the more precise *choux*, in upright bows on the shoulders, in panel-like effects on the skirt, produced by three or five perpendicular rows, each terminated by a bow at the foot.—in fact in any pretty way that fancy may dictate.

The newest use of ribbon is its combination with lace insertion in alternate perpendicular rows for summer wraps. These ribbon wraps are demi-long capes, sometimes plaited in the back, but oftenest in circle shape, either with or without high shoulders, as illustrated on page 506. Watered and faille ribbons are used, either black, or a color with black lace, and plaited or gathered ruffles of lace form the trimming.

Extremely high shoulder-effects are on the wane, both for dresses and wraps. There is an almost endless variety in the styles of full sleeves, but the fullness falls in soft folds instead of being arranged high above the shoulders, although, if becoming, a moderately high arrangement is retained. Sleeves made of a different material from that in the waist are more frequently seen than those matching. Sleeves of plain satin are used with almost every seasonable fabric.—silk, light woolens, and lace,—and lace sleeves are used in the same apparently indiscriminate way, even in cloth costumes, almost invariably, however, over a lining of the waist material. The combination of lace with cloth is always inartistic, and can never be more than a passing fancy. Sleeves of the new "chameleon" (changeable) silk are used in silk, woolen, and lace dresses, even when the material does not appear elsewhere in the dress.

Silk gloves come in colors to match gowns, and some have embroidered tops. Black silk gloves are worn with all kinds of costumes, stitching in color relieving their somberness and matching them with the costume. The popular fancy for finish at the throat, especially if the neck be trimmed with lace, is two stick-pins, from two to three inches in length, with jeweled heads, crossed diagonally.

Lady's Costume.

THIS very stylish costume is arranged with the "Thelma" waist, and the "Ashbourne" skirt (illustrated in the April number) gathered at the back, instead of plaited as shown in the April number. The designs can be plainly seen from the illustrations: the materials and trimmings used are pearl-gray *crépon* and silver braid. The half-girdle is of the *crepon* laid in lengthwise tucks. The basque pattern is fully described on page 512.

Lady's Costume. (FRONT.)
THELMA WAIST. ASHBOURNE SKIRT.

Summer Costumes.

MANY of the designs of the light woolens, in plaids, stripes, and figures, which were so popular in the spring, are reproduced in inexpensive cottons and in light summer silks, and compose dresses which are apparently only later and lighter editions of the spring costumes.

The figured India silks and chameleon silks, as the light changeable taffetas are called, compose a large proportion of the summer street-gowns, and will also be used for house and evening dresses. Draped flounces of the dress material, sometimes veiled with black lace flounces, are a favorite finish for the plainly made skirts, and the waists have garnitures of ruffled *chiffon* or lace, and tiny jackets of the material edged with accordion-plaited lace ruffles headed with a passementerie of gold or silver braid; or they are plainly made with rolling collar or high Medici ruff of velvet, shirred at the back.

One especially dainty style of summer dress is a dark green China silk with white flower pattern, which is made with a simple skirt faced across the front and side breadths with a band of dark green velvet about ten inches wide, headed with a galloon; and a short, close-fitting basque whose only garniture is a Medici half-collar rising high in square corners at the back, the velvet of which it is composed coming down to form a V of about two inches in width, outlining the neck. A white throat with such a background needs nothing else to call attention to its perfection.

But velvet is not so frequent a garniture and combination as lace and beaded passementerie for silks and light woolens such as challies and *crepons*, which make charming summer traveling-dresses. The black lace dresses so popular two years ago are having a revival this season, and it is predicted that they will be even more worn than the drapery nets, of which so many becoming and dainty dresses are composed.

Gingham and cambric dresses are modeled upon the same designs as the more elegant gowns, with the exception that the coats do not appear in such materials. A neatly fitted basque or round waist supplements the regulation bias-seamed skirt with many or few plaits in the middle of the back.

Bridal Toilets.

WHATEVER fashions come and go, the bridal toilet still retains much of its individuality. The richest and most attractive of fabrics and the purest of white tones are always devoted to it.

Silver-brocaded satin is the most admired material for the wedding-gowns of those whose purses can afford such sumptuous robing; and so elegant is the fabric that excess of garniture is quite out of place, and the trimming is usually a tablier of crystal-jeweled lace or rare white lace, and a thickly plaited ruche of *chiffon* or satin around the skirt and the long square or pointed train. The corsage is often cut modestly low and with short sleeves, if the bride has neck and arms sufficiently beautiful to be worth displaying, and the waist is finished with a bertha of lace, or with a ruche of thickly massed, fine white flowers, such as orange-buds, lilies of the valley, white lilacs, hyacinths, or orchids.

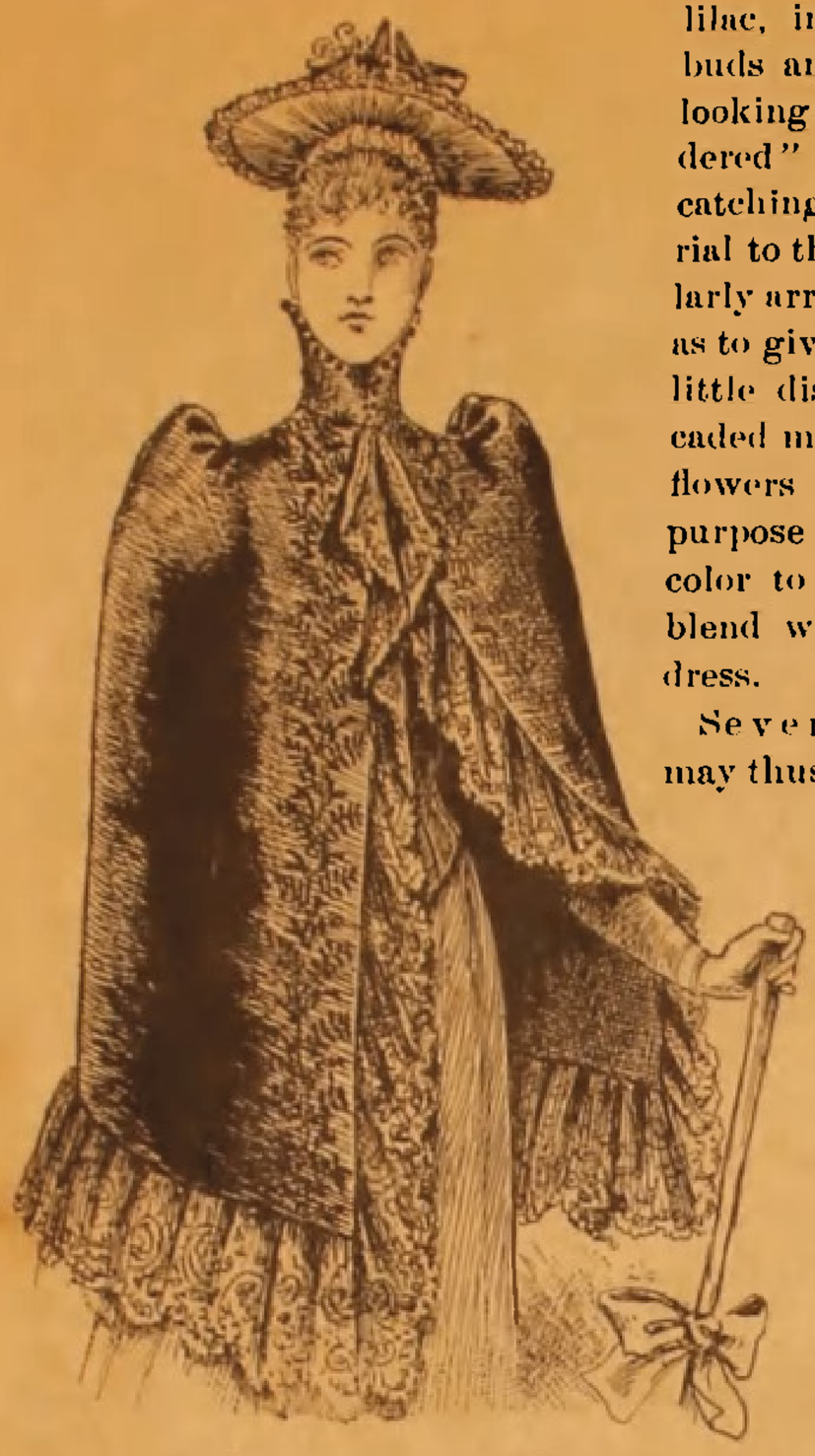
The veil is of white tulle, and may be arranged so as to fall over the face, or fastened in the high coiffure with a coronet or half-wreath, and allowed to fall backward entirely, almost to the end of the train.

Faille, surah, satin, brocade, and even *crepe de Chine* are also used in bridal toilets, according to taste. A very youthful bride may wear a distinctly girlish style; but as most of the brides in society reach the age of twenty two or three, or more, before they assume the duties of matrimony, a more dignified and stately style of dress is usually preferred.

Some brides this season who elect to go to the altar in what has come to be called the "going-away gown," select white for this also; but the costume is not in the least like the traditional bridal robe: it is made of white French broadcloth, in severely simple style, with fan-plaited skirt, training very slightly and finished with a deep hem trimming upon the right side, topped with a row of silver galloon, and a Louis Quinze coat with silver galloon trimmings. The hat is a toque to correspond with the dress, and if flowers are liked for trimming, a bunch of lilacs in pale purple shades may be used. The beautiful material called *crepon* is also suitable for such a gown, and will look well with surah vest and side panels.

Crepe de Chine and *crepon* are favorite materials for bridesmaids' dresses, which are often very picturesquely made. The flower-costume is a pretty style for summer. In this the material is a delicate tint of *crêpe* over silk,—rose-color, green, lilac, or blue,—and fine flowers, such as tiny sprigs of

Lady's Costume. (BACK.)
THELMA WAIST.
ASHBOURNE SKIRT.



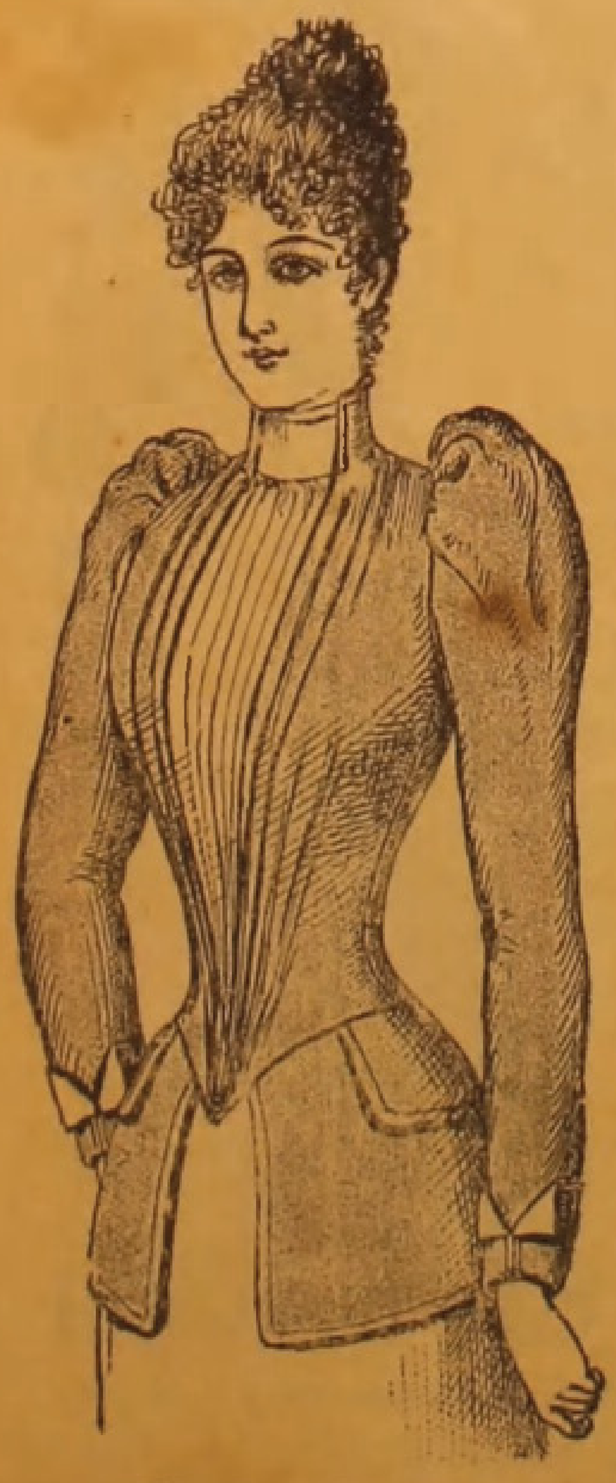
Lady's Summer Wrap.
CIRCLE CAPE.

lilac, infinitesimal rosebuds and other natural-looking blossoms, "powdered" on the dress, catching the thin material to the silk, but regularly arranged all over so as to give the effect, at a little distance, of a brocaded material. The flowers chosen for this purpose are always of a color to harmonize and blend with that of the dress.

Several bridesmaids may thus represent each a different flower, and carry silk bags of their color, filled with flowers like those on the costumes.

Lady's Summer Wrap.

THE pattern used for this wrap is the "Circle" cape with high shoulders, the pattern for which was given with the February number. It is here shown made in very dark red surah silk trimmed with a full ruffle of black French lace and a jet collar. The hat is of dark red illusion, shirred, and trimmed with loops of red ribbon and a large cluster of cherries with foliage. This pattern was described in the February number.



Monica Basque.

Monica Basque.

IN this basque, suitable either for house or street wear, the severity of the coat effect is modified by having the fronts plaited over a full vest. At the back it is pointed in shape, to match the front, and the skirt-pieces extend only as far back as the side-form seams. It is an especially becoming design, suitable for all classes of silk and woolen materials, a contrast being desirable in the goods used in combination. The illustration shows meadow-green cashmere with cream surah for the full vest, front of the collar, and the revers on the sleeves. See page 512 for full particulars about the pattern.

Plain Circle Cape.

THE circle cape of medium length, either with or without a full effect on the shoulders, is especially popular at present, and its popularity will undoubtedly continue during the coming autumn and winter. At present these capes are made in light quality cloth, black, brown, tan-color, blue, brown, dark red, etc., sometimes trimmed with braid, sometimes only pinked on the edges, and worn for traveling and other practical uses; and more dressy styles are made of black silk trimmed with lace and passementerie. These are for occasional wraps, either for walking or driving, and for church and visiting wear.

The illustration shows a cape without fullness on the shoulders, made of black surah silk with embroidered net insertion placed at regular intervals all around. The plaited flounces on the bottom are of net to match, with embroidered edges, and two rows of the same kind of lace give the effect of a very deep falling collar. The standing collar is of openwork jet. The hat is of black chip, trimmed with plaitings of lace matching that on the cape, and a bunch of pink roses. In the preceding column is shown an illustration of a circle cape with high shoulders, the pattern for which was given in the February number. For description of the "Plain Circle Cape," see page 512.

Plain Circle Cape.

Lady's House-Dress.

A SIMPLE but very becoming style for a house-dress made of medium or light weight goods. The waist—the "Fanshaw"—extends about an inch below the waist-line, on the hips, and describes a very short point in the back. The yoke effect is on the front only, the middle of the back being a little full at the bottom only. The illustration shows pale blue challie with spots of a darker shade, and a pretty effect is produced by the strips of material below the ruffle on the front, under which blue velvet-ribbon is run. The sleeves are trimmed in the same manner. The model is especially good for washable materials. The skirt is made of straight breadths mounted quite plain in front and gathered at the sides and back. The waist pattern is fully described on page 512.

Ilona Morning-Jacket.

THIS simple model is suitable for a combing-jacket or for a house-jacket to be worn with different skirts. For the first purpose it is best made in washable goods, although smooth-finished flannel can be used; and for a house-jacket, any of the light-weight woolens and silks can be used,

India or foulard silk, either plain, striped, or figured, being preferable. Embroidery or lace can be used for trimming.

The back pieces and side forms are cut short, forming a dull point in the middle of the back, and a gathered skirt-piece is added. The fronts are loose and full, and held in to the figure by a sash-ribbon proceeding from the back side-gore seams. See page 512 for full particulars about the pattern.

Summer Millinery.

(*See Page* 509.)

No. 1.—Neapolitan hat trimmed with a plaiting of black lace, black ostrich-feathers, and loops of saffron-colored ribbon. The openwork crown is lined with saffron-tinted silk.

No. 2.—Fancy white straw hat with lace-straw brim turned up to form a fan at the back.

No. 3.—Toque of black Chantilly lace and pale pink silk. The lace is wired into wing-shaped bows, and the garniture is complete with two large pink roses.

No. 4.—Bonnet of embroidered brown silk, with gold leaves and aigrette garniture, and brown velvet strings.

No. 5.—Wide-scalloped shell-shaped black straw hat, trimmed with fans of black embroidered net and full-blown tea-roses.

No. 6.—Pale green straw hat with curved and indented brim.

No. 7.—Double-crown bonnet of fancy black-and-gold braid.

No. 8.—Bonnet of white and black lace-straw.

No. 9.—Low-crowned black straw hat with wide indented brim. Garniture of pink heath-flowers.

Lady's House-Dress.

FANSHAW WAIST. FULL SKIRT.

No. 10.—Blue fancy-straw turban trimmed with gold-spotted blue tulle and gold-colored flowers.

No. 11.—Hat with rolling brim of gold braid, and soft crown of embroidered lilac *crepe* fastened with loops of purple velvet. Purple ostrich-tips at the back.

No. 12.—Toque of black-and-gold braid and gold tinsel net. The only garniture is a large crimson rose with foliage.

Children's Millinery.

Low, flat crowns are the great feature in children's hats as well as those worn by the "grown-ups." Wide brims of plain, fancy, or lace straws are in every conceivable style and shape, drooping, upstarting, shelving, curling up at the edges, scalloped, indented, or waved, and in almost all cases turning up against the crown at the back.

The new straws are beautiful in texture, and of very light weight in comparison to their firmness. They come in all colors, a delicate shade of brown being the favorite. For young children, wreaths and half-wreaths of summer flowers, such as poppies, daisies, buttercups, and other wild-flowers, are sometimes the only garniture. But ribbons are the craze in millinery decorations, and one of the simplest, as well as most effective, of garnitures is a thick box-plaited ruching of ribbon about two inches wide, which is placed around the hat, not close to the crown, and finished with a large rosette of the same ribbon placed on top of the crown, at the back. This rosette is not a collection of loops, but a *chou* made by gathering one edge of the ribbon together until a rosette in diameter about twice the width of the ribbon, and very full, is formed.

Ilona Morning-Jacket.

When flowers are added to ribbon garniture it is a fancy of the season to have them match the ribbon in color. Thus, with green ribbon, green leaves; with yellow or brown ribbon, buttercups; with scarlet ribbon, poppies or bunches of ripe cherries; and with blue, bunches of "ragged sailors" or "corn-flowers."

Fine white flowers, such as lilacs, lilies of the valley, daisies, and hyacinths, are selected to trim white Leghorn hats, with or without some bows of white gros-grain ribbon. One lovely hat had a wreath of lily-of-the-valley sprays arranged in a radiating circle around the wide flat brim. Brown Leghorns are trimmed soberly with brown ribbon and brightened up with loops of gold braid and gold tinsel.

Sailor hats are worn by children of all sizes and ages; and for little girls' garden-hats are dainty shirred mull flats in pink, blue, red, and white, which are very light for hot weather when the little ones beg to be allowed to go out "without a hat," and yet protect sufficiently from danger of sun-stroke.

The babies wear lovely little caps of white mull, shirred or embroidered, or of crisp fresh lawn, when they are old enough to "sit up and take notice" and not crush the dainty frilled, plaited, and lace-trimmed ruchings of their three-piece caps, which are still the accepted styles for girl babies, while the boys wear hats of lawn with full crowns like a Tam o' Shanter, and shirred wide brims which shade the eyes from summer suns.

BLUE of every shade is rapidly gaining favor.

Fashionable Coiffures.

No. 1.—Coiffure for a young girl. The hair is all brought to the nape of the neck and looped in a single braid, which is fastened with a clasp pin of the style shown in No. 5. The front hair is curled and combed out.

No. 2.—Evening coiffure of light finger-puffs, arranged upon the crown with an ornamental pin of wrought gold, like that shown in No. 4.

No. 3.—Coronet coiffure of a single braid arranged in front of the crown. This is a becoming coiffure when additional hair is required, the hair at the back being combed up from the nape to conceal the ends of the braid. A Castilian comb of old silver mounted on tortoise-shell completes the coiffure. The short front locks are curled closely in a "baby" bang, and the short hair at the nape of the neck is curled closely also.

Fashionable Coiffures.

No. 5.—Miss's hat of fancy lilac straw trimmed with bands and rosettes of pale yellow ribbon.

No. 6.—Sailor hat of scarlet straw, trimmed with fans of scarlet ribbon and a gold buckle. Suitable for a girl of any age.

Ewalda Jacket.

AN especially stylish model, made up in almond-brown Bedford cord, trimmed with brown-and-gold passementerie and fire-gilt bullet-buttons with gold loops. The front is so arranged that it can be worn open, half-closed (as illustrated), or closed quite close at the throat. The design is suitable for all qualities of cloth, and for suitings. The *plateau* hat is of black dotted lace, shirred, with a high arrangement of lace, flowers, and a tied bow of ribbon at the back. The garniture is a white ostrich-feather and a knot of the ribbon.

Summer Hats for Children.

Summer Hats for Children.

No. 1.—Girl's hat of white fancy straw trimmed with white and blue ribbons.

No. 2.—Boy's sailor-hat, with white crown and flecked blue-and-white brim, trimmed with blue ribbon stamped with gold anchors.

No. 3.—White straw hat for a boy. The boat-shaped brim is faced with a band of scarlet velvet-ribbon, and the trimming is a band and bow of white gros-grain ribbon.

No. 4.—White fancy-straw hat for a three-year-old girl. The openwork turned-up brim is laced in and out with narrow scarlet ribbon, which is tied in five bows in front, and the jacket pattern is fully described on page 512.

Ewalda Jacket. (BACK.)

ICE CREAM.
EVERYBODY'S FAVORITE.
See page 530, where you will learn how to get a Freezer, FREE.

A BEAUTIFUL SET OF CROQUET for only one subscription besides your own. See page 530.

Ewalda Jacket. (FRONT.)

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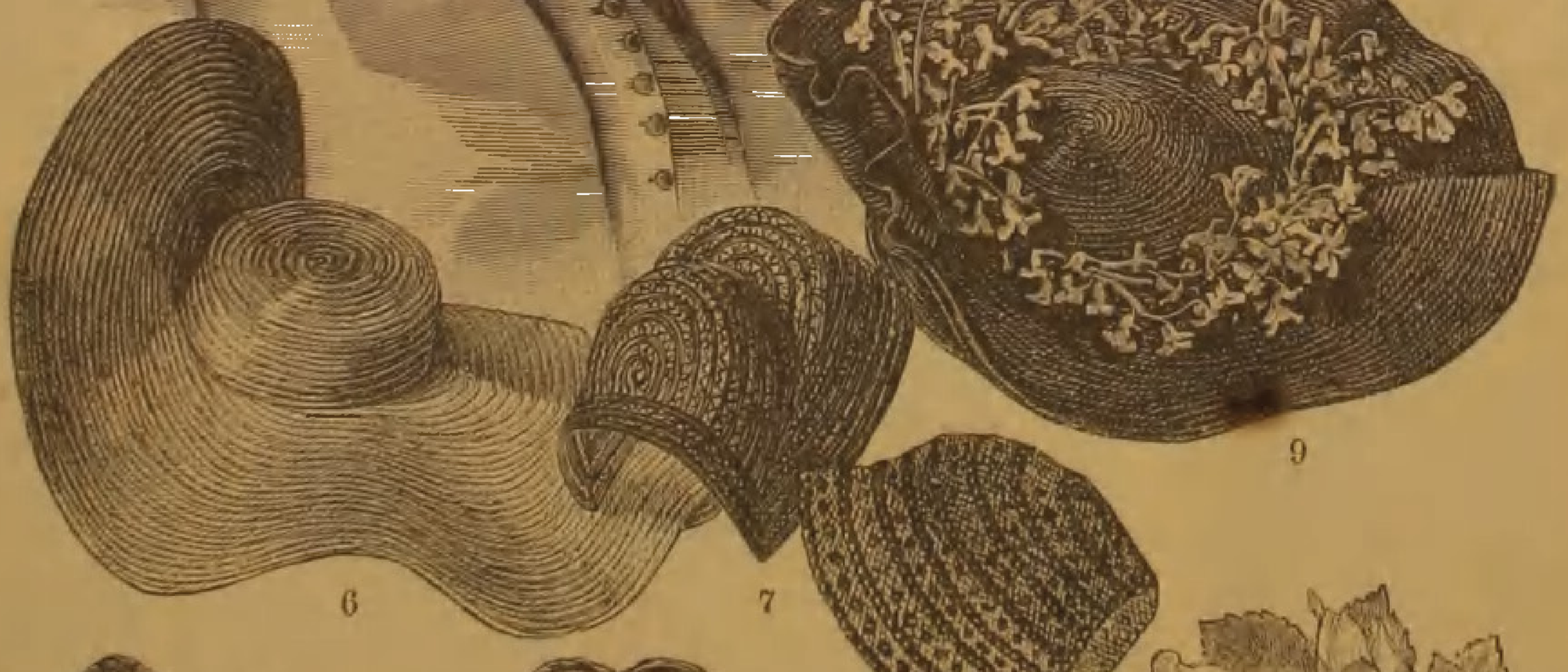

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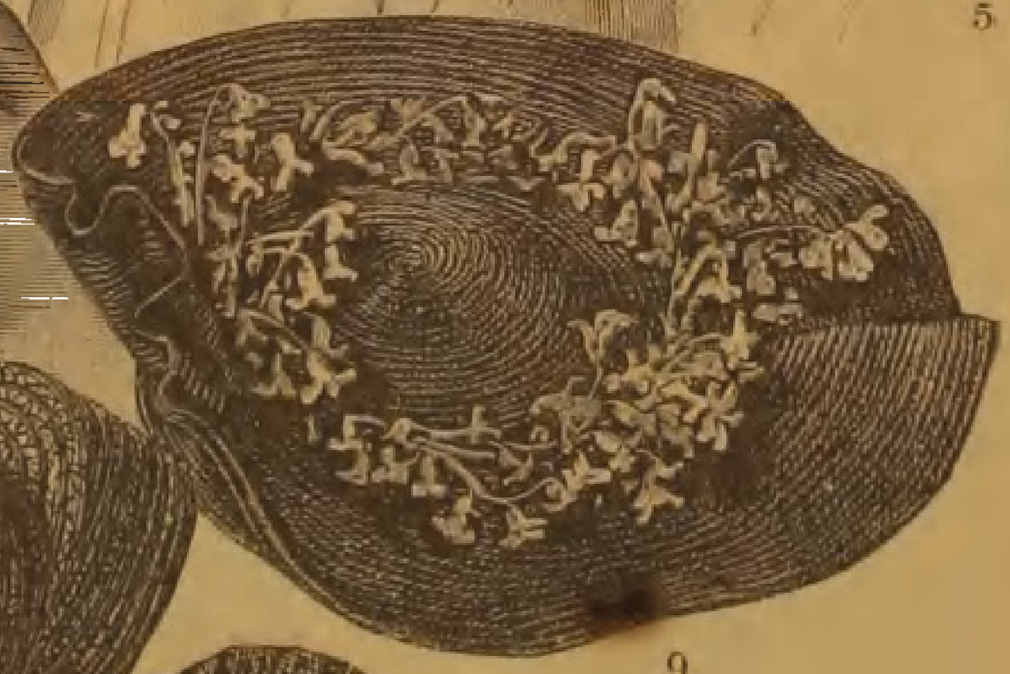

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SUMMER MILLINERY.

(*For Descriptions, See Page* 507.)

Fashion Gleanings from Abroad.

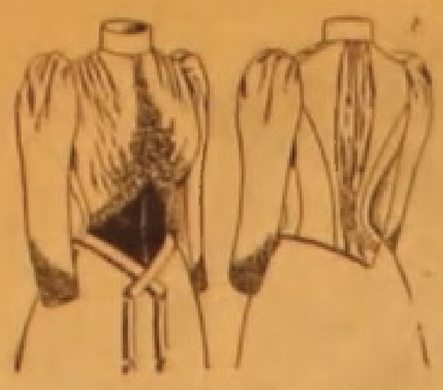
(For Descriptions, see Page 510.)

WE DO NOT GIVE PATTERNS FOR ANY OF THE DESIGNS ON THIS SUPPLEMENT.

Fashion Gleanings from Abroad.

(For Descriptions, see Page 510.)

WE DO NOT GIVE PATTERNS FOR ANY OF THE DESIGNS ON THIS SUPPLEMENT.

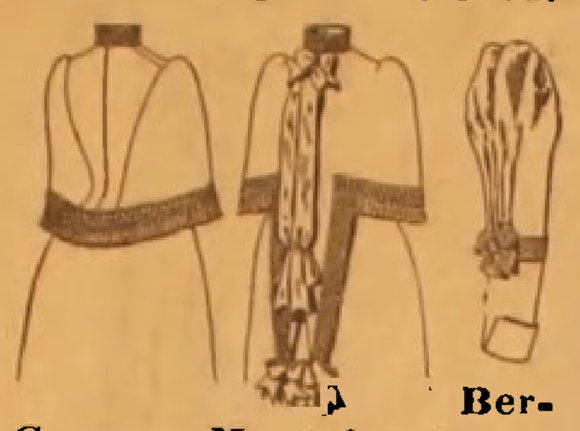


Nadjeska Waist.

Lameda Basque.

Marcella Sleeve.

Adrienne Morning-Dress.



Genevra Mantelet.

Berthia Sleeve.

Essie Apron.

Idella Dress.

Sailor Cap.

Yachting or Tennis Shirt.

Alla Dress.

Fifine Dress.

Nina Cloak.

Ilda Dress.

Clare Dress.

Standard Patterns.

Descriptions of these Patterns will be found on page 512.

PATTERNS of these desirable models being so frequently called for, we reproduce them in miniature this month in order to bring them within the limit of time allowed for selection. For it should be remembered that one inestimable advantage of our "Pattern Order" is that the holder is not confined to a selection from the patterns given in the same number with the "Pattern Order," but the choice may be made from any number of the Magazine issued during the twelve months previous to the date of the one containing the "Pattern Order." *Always remember that a "Pattern Order" cannot be used after the date printed on its back.*

Descriptions of the Designs on the Supplement.

WE DO NOT GIVE PATTERNS FOR ANY OF THE DESIGNS ON THE SUPPLEMENT.

THE designs on our Supplement are selected from the most reliable foreign sources, and also represent popular fashions here. They furnish suggestions for draperies, trimmings, combinations, etc.,—in fact, for every detail of the fashionable toilet,—and the models are so practical, and in many instances differ so little from the patterns we give, that they can easily be modified even by the least experienced amateur, to suit individual needs, and adapted to all seasonable fabrics, simple as well as expensive; while for professional dressmakers they are invaluable.

1.—Empire commencement-dress of white *crêpe de Chine* trimmed with embroidered *chiffon* and narrow black velvet ribbon. The high corsage has a ruff of white *chiffon*, and the arms are covered with long white gloves trimmed with velvet ribbon.
2.—Jacket of black *sicilienne* trimmed with black silk cord passementerie.
3.—Gold bracelet set with turquoise and pearl cluster.
4.—Silver pin representing riding-cane and horse-shoe set with pearl initial.
5.—Jacket of pearl-gray ladies' cloth with black braiding.
6.—Costume of *rose bengale crépon*, with rose-tinted crystal passementerie.
7.—Girl's hat of finely plaited notched-edged *point d'esprit*, trimmed with loops of wide crimson ribbon.
8.—Tennis dress with skirt of dark-blue jersey flannel, and waist of white with blue dots.
9.—Costume of black summer camels'-hair, with garniture of round steel nail-heads.
10.—Walking-dress of dark brown Henrietta cloth with ruches of folded and gathered material.
11.—Pearl lace-pin with crescent and star-flowers.
12.—Commencement toilet of white mull with garniture of violet velvet ribbons.
13.—Hat of white fancy straw with scarlet ostrich-tips.
14.—Pink cashmere dress for girl of six. Chemisette and sleeve-bows of dark red velvet.
15.—Jacket of billiard-green cloth with gold embroidery and white vest.
16.—Toilet of rose-pink China silk and white embroidered silk.
17.—Toilet of pearl-gray brocade with lilac velvet fronts.
18.—Costume of dark-green faille with V's of passementerie to match.
19.—Jacket of tan-colored "faced" cloth.
20.—Girl's dress of blue silk trimmed with black velvet ribbon.
21.—Jacket of gray cloth with silver straps and white vest.
22.—Costume of gray-and-rose striped Bengaline, with collar, cuffs, and corselet of dark-gray velvet, and black silk front with chevron-stripes of lace insertion over rose-color.
23.—Traveling pelisse of gray cloth.
24.—House-waist of blue polka-dotted China silk with gold passementerie corselet.
25.—Summer dress of gold-colored and white organdie with gold ribbon bands. Hat of accordion-plaited lawn, with cluster of gilt flowers.
26.—Costume of bronze India silk with white embroidered waist and skirt trimmings.
27.—Ulster of tan-colored cloth with gold galloon trimmings.
28.—Wrap of gray silk with black lace appliqué garniture.
29.—Promenade dress of disk-spotted heliotrope camels'-hair, with gilt passementerie and purple velvet combination.
30.—Girl's dress of gray cashmere, with green velvet vest and netted gray-and-gold girdle.
31.—Silver star set with Rhinestones, for coiffure ornament.
32.—Fashionable coiffure, and neck garniture of yellow ostrich-feathers.
33.—Gold arm-band set with garnets *en cabochon*.
34.—House-dress of bronze Bengaline with silk buttonholing.
35.—Crescent brooch set with diamonds and an enameled clover-leaf.
36.—Girl's costume of tan-colored silk and brown velvet.
37.—Excursion costume of gold-figured green silk with gold-colored front and white lace fichu. Parasol to match the costume.
38.—Medici collar of silver lace, to wear with any costume.
39.—Toilet of white *bengaline de soie*, trimmed with white Chantilly lace and crystal fringe.
40.—Heart-shaped necklace-pendant set with diamonds.
41 AND 42.—Front and back views of summer wrap of white cloth trimmed with brown feather bordering.
43.—Summer promenade-dress of white broadcloth with girdle of silver galloon.
44.—Bracelet of gold representing a riding-cane with horse-shoe set with initial in pearls.
45.—Grecian coiffure of *creped* hair, unornamented.
46.—Costume of bias-striped chameleon silk in red and gray, with red silk vest and silver cord garnitures.
47.—Driving dress of green mohair with green cloth jacket and white vest. White hat trimmed with green feathers.
48.—House dress of embroidered blue gingham.
49.—Toilet of black brocaded grenadine and pink silk.
50.—Costume of maize-colored mohair with brown velvet straps, buttons, and collar. Jabot of gold tissue.
51.—Reception dress of lilac veloutine with white vest and bow-knot garniture of silver galloon. Silver lace hat with lilac spray.
52.—Back of costume 43 in white broadcloth.
53.—House dress of pale blue Scotch zephyr, with white disks and sleeves of white all-over embroidery.

Notes on Children's Dress.

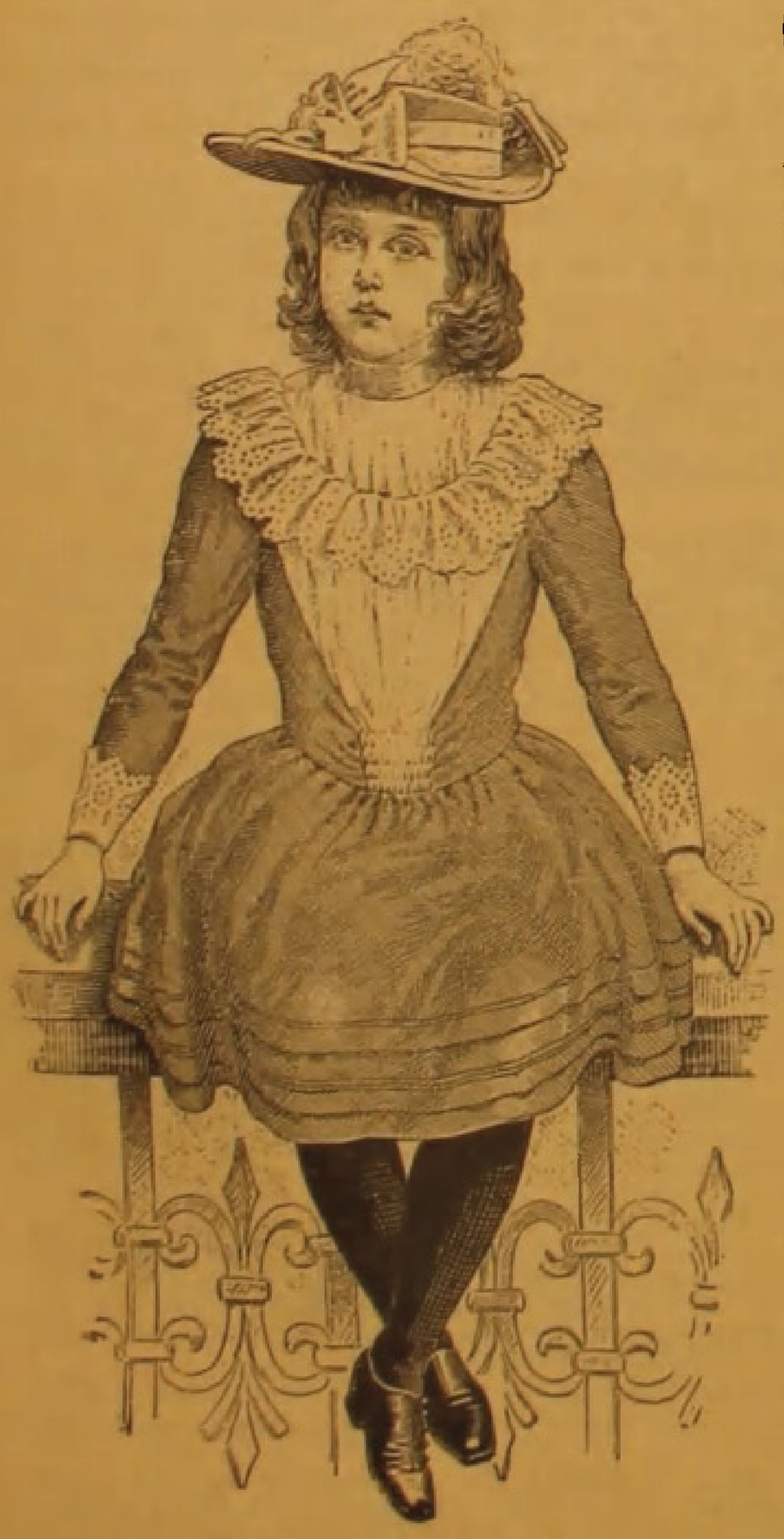
THE favorite colors for dresses made up in Scotch zephyrs and ordinary checked ginghams, for girls of from two to ten years, are blue and pink. They are all made with plain skirts, sometimes hem-stitched, with embroidery of white on the goods above the hem-stitching, and have either plain waists trimmed with V's of Hamburg insertion, or box-plaited waists and short over-jackets edged with white embroidery; or they are made with baby waists having yokes of white embroidery, over which fall pretty odd-shaped jackets, pointed, rounded, or square, according to fancy. The sleeves are full, and simply gathered at the wrists with bands of embroidery. The hems are usually put in the skirts about five inches deep, and the skirts reach to the floor for two years; for three years, to the ankle; for four years to the shoe-tops; for six years they are a trifle shorter yet; and so on to ten years of age, when skirts begin to lengthen again, until at sixteen they are made the length of a lady's short walking-dress.

Queenie Waist.

White lawn dresses are made of fine hem-stitched flouncings, sometimes plain, but more often richly embroidered above the hem. They are laundered to hang in deep folds or plaits, but are only gathered to the waist in making. As in dresses for ladies, most of the ornamentation is lavished upon the waist; and many are made to wear with lawn and cambric guimpes.

Queenie Waist.

FOR an undeveloped figure, this is an especially becoming design. It is arranged the same back and front, and can be combined with any style of skirt, one made of straight breadths, gathered, being preferable. The illustration shows dark blue summer-flannel trimmed with rows of narrow velvet ribbon. The model is suitable for silks, woolens, or washable goods, and a waist of this style could be worn with various skirts. The pattern is described on page 512.



Cheta Dress.

Cheta Dress.

A CHARMING little dress made in pale pink Chambery, with the full piece on the front of the waist of white lawn, and white embroidery on the waist and sleeves. The waist is a little full in the middle of the back, and the trimming is carried across the back to match the front. The skirt is gathered. The hat is of straw of the natural color, trimmed with white and pink ribbons. The design is suitable for all but the heaviest materials usually chosen for girls' dresses. The embroidery can be omitted, and any combination of materials is allowable. The pattern is fully described on page 512.

Nyra Dress.

Nyra Dress.

AN especially pretty design, appropriately made up in seasonable goods. The waist is the same back and front, and the skirt is gathered at the sides and back. The illustration represents it made of cream-white cashmere, the yoke and sleeve-bands of ruby velvet, and rows of ruby velvet-ribbon on the skirt. The hat is of cream-white mull, shirred, and trimmed with ruby ribbons. For particulars about the pattern, see page 512.

Signa Jacket.

A THOROUGHLY practical model, and very stylish and becoming as well. It is partially fitted, the outer fronts falling loose over a plaited vest which can be omitted, if desired. The design is suitable for all classes of cloth and the heavier varieties of suitings. The vest may match or contrast with the remainder of the garment. See page 512 for full particulars about the pattern.

Signa Jacket.

Ereen Jacket.

THIS jaunty little garment is equally suitable for a girl or a boy, and appropriately worn by the latter with either a kilt-skirt or short trousers. Jackets in this style are often made in velvet with the blouse of white lawn or surah, and used as any other outer garment; and the same design is made in plaid and plain gingham and worn with a plaid gingham skirt. The jacket is entirely independent of the blouse, and can be worn separate from it. The pattern is fully described on page 512.

Ereen Jacket.

Descriptions of Our Cut Paper Patterns.

REMEMBER THAT EACH "PATTERN ORDER" ENTITLES THE HOLDER TO BUT ONE PATTERN.

Always refer to these descriptions before sending your "Order" for a Pattern, that you may know just the number of Pieces that will be in the Pattern received.

FOR GENERAL DIRECTIONS FOR CUTTING AND JOINING THE PIECES, SEE THE BACK OF THE ENVELOPE IN WHICH THE PATTERN IS INCLOSED.

MONICA BASQUE.—Half of the pattern is given in 12 pieces: Lining for front, outer front, full vest, side gore, side form, back, skirt-piece, pocket-lap, collar, two pieces of the sleeve, and cuff. The full vest is to be gathered top and bottom and placed on the lining so that the notches at the neck will match, and the clusters of holes near the bottom. The outer front is to be laid in three plaits at the top, turned toward the front, and is to be gathered at the lower edge, forward of the hole. The larger piece of the sleeve is to be gathered at the top, between the holes. The rows of holes in the cuff show where it is to be turned over to form the revers. A medium size will require four and a quarter yards of goods twenty-four inches wide, and five-eighths of a yard additional, for the vest. Patterns in sizes for 34, 36, 38, and 40 inches bust measure.

FANSHAW WAIST.—Half of the pattern is given in 10 pieces: Front, full piece for front, side gore, side form, lining for back, full back, collar, and three pieces of the sleeve. The full piece for the front is to be gathered or gauged across the top in a line with the row of holes, and at the bottom forward of the hole. The full piece for the back is to be gathered at the bottom, back of the hole. The large piece of the sleeve is to be gathered at the top, between the holes; and at the bottom gathered or shirred in a line with the row of holes, and the gathering placed to the row of holes across the sleeve. A medium size will require two and three-quarter yards of goods twenty-four inches wide, and three yards of velvet ribbon to arrange as illustrated. Patterns in sizes for 34, 36, 38, and 40 inches bust measure.

THELMA WAIST.—Half of the pattern is given in 10 pieces: Lining for front, full front, side gore, side form, lining for back, outer back-piece, bodice, collar, and two pieces of the sleeve. The full front is to be laid in two plaits at the top, turned toward the front, and gathered at the bottom, forward of the hole. The outer back-piece is to be laid in two plaits turned toward the middle of the back. The sleeve is to be gathered at the top, between the holes. A medium size will require three and a half yards of goods twenty-four inches wide, and five yards of trimming to arrange as illustrated. Patterns in sizes for 34, 36, 38, and 40 inches bust measure.

ILONA MORNING-JACKET.—Half of the pattern is given in 7 pieces: Front, side form, back, skirt-piece for back, collar, sleeve, and cuff. The front is to be gathered at the top, forward of the hole. The skirt-piece is to be gathered at the top. The sleeve is to be gathered top and bottom between the holes. A medium size will require four yards of material twenty-four inches wide, and three yards of trimming. Patterns in sizes for 34, 36, 38, and 40 inches bust measure.

EWALDA JACKET.—Half of the pattern is given in 8 pieces: Front, facing for front, side gore, side form, back, collar, and two sides of the sleeve. The sleeve is to be gathered at the top, between the holes. A medium size will require two and a half yards of goods forty-eight inches wide. Patterns in sizes for 34, 36, 38, and 40 inches bust measure.

PLAIN CIRCLE CAPE.—Half of the pattern is given in 2 pieces: One-half of the cape, and collar. Baste the gores on the shoulders and fit them to the figure before cutting them off. The medium size will require two yards of goods forty-eight inches wide, or four yards twenty-four inches wide; and ten yards of trimming for one plain row. Patterns in two sizes, medium and large.

GORED FOUNDATION SKIRT.—Half of the pattern is given in 4 pieces: Half of front, one side gore, half of back breadth, and belt. Sew to the belt with a shallow plait on each side of the front, near the seam; a shallow plait in each side gore, forward of the notch; and gather the side gore, back of the notch, with the back breadth. A medium size will require four and three-quarter yards of goods twenty-four inches wide. Patterns in three sizes: 23 waist, 39 front; 25 waist, 40 front; 27 waist, 41 front.

SIGNA JACKET.—Half of the pattern is given in 10 pieces: Lining for vest, plaited vest, outer front, side gore, side form, back, collar, two sides of the sleeve, and cuff. The side-form and back side-gore seams are to be left open below the lower notches. The opposite notches at the top and bottom of the plaited vest indicate the middle. The portion forward of the notches is to be laid in a box-plait on the outside. The holes indicate a plait to be turned forward on the outside. The sleeve is to be gathered at the top, between the holes. The size for fourteen years will require three and a half yards of goods twenty-four inches wide. Patterns in sizes for 14 and 16 years.

QUEENIE WAIST.—Half of the pattern is given in 9 pieces: Front, side gore, side form, and back, of lining; full front, full back, collar, belt, and sleeve. The full front is to be gathered at the neck and shoulder, and at the bottom, forward of the hole. The full back is to be gathered at the neck and shoulder, and at the bottom, back of the hole. The sleeve is to be gathered at the top, between the holes; and is to be shirred at the bottom between the rows of holes, and drawn in and secured to a band on the inside, of a size that will slip easily over the hand. The size for twelve years will require three yards of goods twenty-four inches wide. Patterns in sizes for 12, 14, and 16 years.

EREEN JACKET.—Half of the pattern is given in 9 pieces: Front, back, and sleeve of blouse; front, back, and two sides of the sleeve of jacket; collar and cuff. The opposite notches at the top and bottom of the front of the blouse designate the middle; the portion forward of the notches is to be laid in a box-plait on the outside. The blouse may be gathered at the bottom and sewed into a band of the desired size, or it may be hemmed at the bottom and have an elastic ribbon run through the hem. The collar may be attached to the blouse or jacket, as preferred, or it may be separate from both. The size for four years will require one yard and three-eighths of velvet, one yard of goods twenty-seven inches wide for the blouse, collar, and cuffs, and one yard and three-quarters of narrow embroidery. Patterns in sizes for 4 and 6 years.

CHETA DRESS.—Half of the pattern is given in 9 pieces: Front and back of lining for waist, full front, side piece, full back, collar, two pieces of the sleeve, and one-half of the skirt. The full front of the waist is to be gathered at the neck, forward of the hole, and at the bottom it is to be shirred below the row of holes. The full back is to be arranged in the same way. The rows of holes near the top of the lining show where the trimming is to be placed. The skirt is to be gathered at the top. The size for eight years will require five yards of goods twenty-four inches wide, one-half yard of goods for the full front, and two yards of embroidery. Patterns in sizes for 8 and 10 years.

NYRA DRESS.—Half of the pattern is given in 6 pieces: Plain front and back, full front and back, sleeve, and one-half of the skirt. The full front and back pieces are to be gathered at the top, and forward and back of the hole at the bottom of each, respectively. Above the fullness at the top the waist is to be faced with velvet. The sleeve is to be gathered at the top between the holes, and is to be gathered or shirred at the bottom in a line with the row of holes, and a band of velvet of the necessary size placed outside of the shirring. The skirt is to be gathered at the top. The size for six years will require four and a half yards of goods twenty-four inches wide. Patterns in sizes for 4, 6, and 8 years.

LAMEDA BASQUE.—Half of the pattern is given in 11 pieces: Plain front vest, jacket front, side gore, side form, back, revers for back, collar, and three pieces of the sleeve. The dart in the vest indicates the middle and shows how far it is to be lapped. The row of holes in the vest shows where it is to be turned back to form the revers. The revers for the back is to be joined in the side-form seam and turned toward the middle seam. The full outer piece of the sleeve is to be laid in four overlapping plaits above the upper notch, and gathered at the top between the holes. A medium size will require three yards and a half of goods twenty-four inches wide, and three fourths of a yard of contrasting goods for the vest. Patterns in sizes for 34 36, 38, and 40 inches bust measure.

NADJESKA WAIST.—Half of the pattern is given in 11 pieces: Lining for front, full front, girdle, side gore, side form, lining for back, full back, collar, and three pieces of the sleeve. The full outer front is to be gathered at the shoulder, and at the bottom, forward of the hole. The full back is to be shirred between the rows of holes. The outer piece of the sleeve is to be gathered at the top between the holes, and at the edges above the upper notches. A medium size will require three and three-quarter yards of goods twenty-four inches wide, and one-quarter of a yard of velvet. Patterns in sizes for 34, 36, 38, and 40 inches bust measure.

ADRIENNE MORNING-DRESS, OR TEA-GOWN.—Half of the pattern is given in 10 pieces: Inner front, full vest, outer front, side form, back, skirt for back, collar, cuff, and two sides of the sleeve. The full vest is to be gathered top and bottom and sewed to the inner front so that the notches will match. The row of holes down the outer front shows where the revers is to be turned back. The skirt-piece is to be gathered and sewed to the bottom of the back piece. A medium size will require eight and one-half yards of goods twenty-four inches wide, five-eighths of a yard for the vest, and three and one-half yards of trimming. Patterns in sizes of 34, 36, 38, and 40 inches bust measure.

GENEVRA MANTELET.—Half of the pattern is given in 3 pieces: Front, back, and collar. A medium size will require two yards of goods twenty-four inches wide, one yard and a half of fringe, and four and one-quarter yards of passementerie. Patterns in two sizes, medium and large.

BERINTHIA SLEEVE.—The pattern consists of 4 pieces: Two plain pieces of the sleeve, full outer piece, and cuff. The outer piece of the sleeve is to be gathered at the top, between the holes, and laid in plaits below, as indicated by the rows of holes. Patterns in a medium size.

MARCELLA SLEEVE.—The pattern consists of 5 pieces: Two plain pieces of the sleeve, full outer piece, and two cuffs. The full outer piece is to be laid in plaits top and bottom, and the plaits are to be tacked flat for about four inches and a half from the bottom. Patterns in a medium size.

IDELLA DRESS.—Half of the pattern is given in 12 pieces: Plain front, full front, strap for front, side form, plain back, full back, collar, sleeve, two straps for sleeve, cuff, and one-half of the skirt. The notches at the top and bottom of the full front designate the middle. The full piece is to be shirred top and bottom, above and below the rows of holes, respectively, and drawn in to fit the plain front. The notch and hole in the strap for the front match with corresponding marks in the plain front. The full back is to be shirred top and bottom, above and below the rows of holes, respectively, and drawn in to fit the lining. The sleeve is to be gathered top and bottom between the holes, and is to be laid in fine plaits between the rows of holes, to bring it in so that the outer holes in each row will match with those in the straps. The skirt is to be gathered at the top. The size for eight years will require four yards and a half of goods twenty-four inches wide. Patterns in sizes for 8 and 10 years.

ALLA DRESS.—Half of the pattern is given in 9 pieces: Back and front of yoke, full back and front pieces of waist, girdle, three pieces of the sleeve, and one-half of the skirt. The full pieces for the waist are to be gathered top and bottom, forward and back of the holes, respectively. The full piece of the sleeve is to be gathered top and bottom between the holes, and the lower edge is to be placed to the row of holes across the sleeve. The skirt is to be gathered. The size for ten years will require five yards of goods twenty-four inches wide, and one yard and three-eighths of velvet. Patterns in sizes for 6, 8, and 10 years.

ILDA DRESS.—Half of the pattern is given in 11 pieces: Plain front, full vest, full front, side gore, side form, back, two collars, and two pieces of the sleeve of the waist; and one-half of the skirt. The vest is to have two quarter-inch tucks run across it above the upper row of holes, and three of the same width between the two lower rows of holes, and is to be gathered at the bottom; it is to be drawn in and placed on the plain lining so that the notches will match. The outer front is to be gathered at the bottom forward of the hole. The separated portion of the upper part of the sleeve is to have six quarter-inch tucks run across it to bring it in to the proper length, and then drawn in to the proper width; the lower part is to be gathered between the holes. The skirt is to be gathered at the top. The size for six years will require five yards of goods twenty-four inches wide. Patterns in sizes for 6, 8, and 10 years.

CLARE DRESS.—Half of the pattern is given in 9 pieces: Front and back of waist lining, front and back of blouse, revers, cuff, two sides of the sleeve, and one-half of the skirt. A band two inches wide, either plain or laid in a box-plait, is to be placed on each front back of the row of holes. The lower edge of the blouse is to be gathered and sewed to the bottom of the waist lining. The upper part of the front of the waist lining is to be faced to simulate the chemisette. The skirt is to be gathered at the top. The size for four years will require one yard and a half of goods, twenty-four inches wide, for the blouse; one-half yard for collar, cuffs, and bands; and one yard and three-quarters for the skirt (if made of dress material), or two yards of deep embroidery. Patterns in sizes for 4 and 6 years.

FIFINE DRESS.—Half of the pattern is given in 8 pieces: Front and back of lining, full front and back pieces, collar, sleeve, cuff, and one-half of the skirt. The full front and back pieces are to be laid in fine plaits, or gathered, forward and back of the holes in each, respectively, to bring them in to fit the lining. The sleeve is to be gathered at the bottom. The skirt is to be gathered at the top. The size for four years will require three yards and a half of goods twenty-four inches wide, and two yards of embroidery. Patterns in sizes for 2 and 4 years.

NINA CLOAK.—Half of the pattern is given in 7 pieces: Front and back of yoke, front and back of skirt, collar, sleeve, and cuff. The skirt is to be gathered at the top. The sleeve is to be gathered top and bottom between the holes. The size for four years will require four and one-half yards of goods twenty-four inches wide, and three-eighths of a yard of velvet. Patterns in sizes for 2, 4, and 6 years.

ESSIE APRON.—Half of the pattern is given in 2 pieces: Front and back. A narrow casing is to be sewed at the upper edge, back and front, to accommodate draw-strings. The front is to have a casing for draw-strings in a line with the row of holes. The size for six years will require two and one-quarter yards of goods twenty-four inches wide, and two and one-half yards of lace. Patterns in sizes for 6, 8, and 10 years.

SAILOR CAP.—The pattern is given in 3 pieces: Two pieces of the cap, and band. The size for six years will require one-half yard of goods. Patterns in sizes for 6, 8, 10, and 12 years.

YACHTING OR TENNIS SHIRT.—Half of the pattern is given in 5 pieces: Front, back, collar, pocket, and sleeve. The medium size will require four yards of goods twenty-seven inches wide. Patterns in sizes for 14, 15, and 16 inches neck measure.

Prohibition of the Liquor Traffic.

W. Jennings Demorest Interviewed in the City of Mexico.

(From "The Anglo-American," Published in the City of Mexico.)

It is scarcely necessary to inform the readers of "The Anglo-American" that Mr. Demorest is one of New York's noted citizens, a man of sterling worth, full of enterprise, and very wealthy. He is the founder, among other successful ventures, of "The Illustrated News," "The Phunniest of Phun," "Young America," and last, but not least, of the well-known "Demorest's Family Magazine," in connection with which the name of his talented wife, Madame Demorest, is widely celebrated. He has also conducted several large building operations—chiefly in Fourteenth Street, New York City, and is the owner of many of the principal business houses in that thoroughfare. He is, too, equal partner in the printing-house of J. J. Little & Co., which has a business of huge dimensions. Furthermore, he was last year a candidate for the mayoralty of New York, and previous to that had received the nomination for Lieutenant-Governor of the State of New York.

Mr. Demorest, together with Madame Demorest, and their daughter Miss Evelyn Demorest, is now staying at the Iturbide Hotel in this city, where they intend remaining for some two or three weeks, after which they will return home to New York.

The writer called upon Mr. Demorest yesterday, and after a few words of preliminary conversation that gentleman plunged into what to him, and to a vast number of other good, earnest men, is the great topic of the day, namely, the drink question. Mr. Demorest has devoted an enormous amount of time and money to the furtherance of the temperance movement, and is most enthusiastic on the subject. It is not an easy task for a reporter to reproduce his glowing and eloquent periods; but the gist of what he had to say, and, so far as possible, his exact words, are given. In reply to a question, Mr. Demorest said:

"Yes, I have been a temperance man and a Prohibitionist all my life. You ask me why I came to Mexico. I will tell you. I came here fully convinced that the world is in a state of transition with reference to the question of intoxicating drinks, and that we are standing on the threshold of great events in connection with the temperance movement. I wish Mexico to be interested in this matter. The labor question, the question of education, in fact, all moral and material questions affecting human life and well-being, more or less hinge on the temperance question. I contend that Prohibition is necessary in the interests of civilization. Drink is a mountain-like barrier in the path of progress. This barrier can only be removed through the enlightenment of the people.

"Most wonderful discoveries as to the nature of alcohol have recently been made by science. Baron Liebig, Pasteur, and a host of other distinguished scientists—many of them belonging to our own continent—have all, after long researches, adopted the theory that alcohol is the very ashes of death. The discovery of microbes in the processes of fermentation was a marvelous revelation. As you may know, fermentation is a kind of decay, sugar or glucose (a composition of sugar and starch) being always present. Fermentation generates the microbes referred to, which are so small that millions of them are included within an incredibly small space, and their existence can only be discovered by the closest microscopic study. These little animals generate and live upon the glucose, exhaling carbolic-acid gas, and emitting from their bodies that which we call alcohol. This same alcohol, whether in the form of beer or pulque or whiskey or other intoxicant, comes into existence in the way mentioned, and in no other way.

"Alcohol has a strong affinity for water, and when drank it produces that tingling sensation which is supposed to be its highest virtue, and without which it would be considered flat and insipid. Nature tries to repel the extraneous matter of alcohol, and in so doing gives rise to the inflammation which is sometimes called warmth,—an agreeable sensation,—and makes intoxicating liquor the most alluring deception and injurious thing in existence, so far as the human system is concerned. Indeed, it serves only to inflame the passions and to produce the frenzy which fills our jails and our workhouses: in fact, it is an entirely diabolical agent. The man who drinks it puts into his body a predisposing cause to all kinds of disease, and places himself at the mercy of any epidemic, which will kill him, first of all. These things are common experiences in almost every family. Surely, when his intelligence fully grasps the nature of alcohol, a man would no more drink it than he would drink strychnine or arsenic.

"The highest judiciary in the United States has clearly stated that intoxicants are the prolific cause of nearly all the crime and misery in the country. In Great Britain, Parliament, acting upon a similar view, is taking strong ground in the direction of suppressing the liquor traffic. In fact, the whole world is tending towards its abolition. The entire moral atmosphere, together with almost every phase of our civilization, is largely dependent upon this great question, and is becoming exceedingly active regarding it. This is especially true of the United States, where we have in almost every State and county an organization of a political character for the direct purpose of bringing about the abolition of this terrible curse—the liquor traffic. These organizations, coupled with the radical portion of the religious press and the churches generally, have taken up the subject with an earnestness and effectiveness that promises in the near future an entire change of public feeling on the question—all tending in the direction of total Prohibition.

"We have several States which have already adopted Prohibition, for example, Maine, Iowa, Kansas, the two Dakotas; and there is a large number of counties in other States in which there is not a brewery or distillery to be found. In many of the towns of those States, a large proportion of the children have never even seen a drunken man. In certain sections the jails and poorhouses are empty, and general prosperity exists.

"Sometimes it is said by interested parties that 'Prohibition does not prohibit.' Results prove this statement to be the very reverse of the truth. If it were otherwise, the liquor-sellers would not spend their money as they do, to prevent the passing of prohibition laws.

"We have not only straws, but sticks of timber showing in what direction the cyclone of progress in this matter goes. Why, Congress has recently actually brought in a report favorable to the total abolition of the drink traffic and the prevention of the manufacture, sale, and importation of intoxicants, and proposing that this should be done by an amendment of the Constitution!

"Owing to the wonderful developments of feeling thus manifested on the part of our people, a very determined effort is now being made to rid our nation of the drink-curse. I need not refer to the extraordinary devastation, crime, and wretchedness which prevail in the city of New York, and which are almost entirely caused by drink. The same thing is true of nearly all large cities.

"When I wander through the streets of this beautiful city of Mexico I find every corner filled with allurements to people to drink. It is true, I do not see many people lying drunk on the highway: at the same time I learn,

as the result of private inquiries, that numberless families in the city are affected by the evil consequences of alcohol. The same thing, of course, may be said of the whole of Mexico generally, which, however, is no worse in this respect than other countries or States in which the sale of drink is not prohibited. We are, therefore, called upon by every sentiment of humanity, every spark of intelligence, to do what can be done, to say what can be said, to arouse the people from their present dormant condition, and induce them to rid themselves of the incubus which now weighs the country down.

"There is some prohibition in Mexico. I noticed large spouts projecting from some of the buildings and inquired their use. I was told they were intended to carry the water from the roof, but that this use of them had been prohibited. If you can thus prohibit the flow of water, which merely interferes with the comfort of the people, you certainly can prohibit the manufacture and sale of the deceptive poison, alcohol, which works such alarming injury to the people. I also observed here and there on the walls the notice, '*Se prohibe fijar anuncios*' (Bill-posting prohibited). If this can be done in so simple a matter as bill-posting, it ought to be done in the infinitely more important matter of strong drink, which should be banished from the land. It is only a question of time, however, and repression of the drink traffic must and will be brought about as the people become aware of its dangers.

"I observe that vast strides have recently been made in Mexico, in the direction of general improvements and progress. The very shops, even, show a strong appreciation of the beautiful. The same spirit which has brought about these beneficent results will, I am sure, work mightily with us, and sooner or later annihilate the drink-traffic.

"I have recently read with great interest the splendid speech delivered by President Diaz, on the opening of your Congress, every word of which evidences his earnest desire to promote the welfare of his country. I am convinced that he, and those associated with him in the making of the laws for this interesting republic, will soon follow the example of some of our States, and treat the liquor-traffic as a public nuisance. In this connection I may state that some of us think of bringing the matter before the courts of the United States on the ground that the traffic is such a nuisance, and ought, therefore, to be abated.

"But perhaps I have said enough for the present. Naturally I am a strong believer in printers' ink, and am anxious to make use of it and enlist the sympathies of the press, believing the press to be the mightiest teacher of the age. I trust, therefore, you will again open your columns to me in order that I may, later on, complete what I have to say on behalf of a cause which is working for the highest interests of humanity."

The interview ended, the writer left, thoroughly impressed with Mr. Demorest's earnestness of purpose, and his high, philanthropic motives. It is needless to say that all questions put by the interviewer to Mr. Demorest have been omitted in order that as much space as possible might be given to his remarks.

Medal Contest Notes.

TWELVE Demorest Medal Contests have been held in Providence (R. I.) and its vicinity.

THE latest printed reports say that Wisconsin has received seven hundred Silver Medals.

THE members of the Geneseo (Ill.) W. C. T. U. credit the increased enthusiasm and the unusual amount of work accomplished during the past year, to its week of prayer. A quartette of ministers furnished the music at a Demorest Medal Contest not long ago. It is no wonder they are arranging for another. Three cheers for Geneseo!

THE largest audience ever in Newman (Ill.) Opera Hall—when there was an admission fee—greeted the contestants for the Demorest Gold Medal. Contestants were present from Vermilion, Edgar, and Douglas Counties. The medal was awarded to Miss Anna Siler, of Newman; her subject was, "Home versus Saloon." A beautifully bound copy of "Lucile" was awarded to Miss Ollie Jeffers, of Brockton, for receiving second-best grade. Great credit is due all the contestants. The Union there thinks these contests one of the most successful methods of creating temperance sentiment, and at the same time adding to the treasury. The receipts were $90.55, which will go for temperance work.

THE members of the Missouri W. C. T. U. will not allow Nebraska to get ahead of them. One of its members, Mrs. M. P. Lemen, is over fourscore years of age, and acts as Corresponding Secretary of her local union, President of Neosho County, and as district superintendent of Demorest's Medal Contest. She has given out twenty-five Silver and six Gold Medals.

THE SIXTY-SIXTH Silver Medal Contest for Trumbull County (O.) was held in Brookfield, February 21st. Notwithstanding mud and prevalent influenza, the house was full. This county still ranks first in the State. Mrs. E. W. Bascom, Superintendent of Contests, and Miss C. S. Burnett, County President W. C. T. U., lead the work.

MRS. E. E. MASON, of Wausean (O.), reports $24 net proceeds from a recent Contest. Do not be afraid of charging admittance fee. Miss Unthank, of Wilmington, says: "I think there must have been five hundred people in attendance at our Gold Medal Contest. It was one of the finest audiences I have ever seen in Wilmington."

AT Gurneyville, Clinton County, the daughter of our State Senator, Hon. J. N. Oren, won the Medal. Wish all our State Senators' families were studying the temperance question from our standpoint.—MRS. E. J. GREY, State Superintendent, Medina, Ohio.

HOWELL, MICH.—It affords me much pleasure at this time to comply with your kind invitation to send a few lines upon my work as Superintendent of Demorest Medal Contests in Michigan. The cause is spreading gloriously in our State in several places. During the past month I have sent out 160 books, and nearly 100 Medals, mostly silver. We have to-day enrolled upon our records at this office 1,336 Medals. We have four large Gold Medals in Michigan. These contests are doing a vast amount of good, and they stand prominent as an educator in the great struggle now being waged against the saloon, and for the home. May God bless the work and the workers, is my constant prayer. Yours for the work, MRS. T. B. KNAPP, State Superintendent.

THE following characteristic letter from a successful young contestant may encourage some others to "go and do likewise":

ROCKFORD, ILL.

My dear Mr. Demorest:—I want to thank you for the privilege of making it possible for me to win a Silver and Gold Medal by speaking. Last April there was a Silver Medal Contest here, in which I took part, contesting with eight others, all but one older than I, and I am proud to say I carried off the prize, a Silver Medal. At the district W. C. T. U. Convention at Warren, Ill., a Gold Medal Contest was held where I took part with seven others, all excepting one older than myself, and I am proud to say I again took the medal. I am going to try for the next, and if I succeed will certainly try for the Diamond Medal.

I know it is a good thing for me, and I am glad I have had the privilege of trying. I have been a member of the L. T. L. almost as long as I can remember, but I have learned more about temperance than I ever knew before by reading some of the pieces in your books.

Although I am only a little girl thirteen years old, in the past year I have been secretary, treasurer, and pianist of the L. T. L. I never miss a day at school unless I am too sick to be out, and have lost only half a day in the last three years, excepting the day I went to Warren to attend the Contest; but I felt well paid when I came back with the Medal.

One of your sincere admirers,

ROSE BIGALOW.

Readers of Demorest's Magazine who order goods advertised in its columns, or ask information concerning them, will oblige the Publisher by stating that they saw the advertisement in this Magazine.

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Mention Demorest's Magazine in your letter when you write.

Household.

(*Continued from page* 503.)

"Our Cooking Class."

LESSON XV.

TEA, COFEEE, CHOCOLATE.

I SUPPOSE you all think you know how to make a cup of tea; but I notice very few are so confident as regards coffee. However, a few words in regard to tea will not be amiss, for I might give you some new ideas in regard to tea-making.

In the first place, do not buy your tea in large quantities, unless you have time and knowledge to keep it properly. It should be jealously kept from the air. If you use a caddy, the cover thereof alone is not sufficient, but the neck should be stuffed with paper.

The water for tea must be freshly boiled for that purpose, and used as soon as it boils, and never before. Anyone really fond of tea knows at once if the water used was not freshly boiled: it makes, to them, a great difference in the flavor.

In regard to the pot in which you put the tea to draw, let me caution you: on no account use tin. The tannin in tea acts upon the tin in such a manner as to produce a poisonous compound, thus rendering the beverage most unwholesome. The common earthenware pot is by far the best, and should be well rinsed and scalded before using, thus running no chance of chilling the boiling water to be used in the tea-making.

Allow one teaspoonful of tea for each person and one for the pot, unless you are making for quite a number; then the pot may be left out in the count, and the spoonfuls be scanted. Put the tea in the hot teapot, pour the necessary amount of freshly boiled water upon the tea, cover the pot, place it on the back of the range, and let it draw ten minutes and it will be ready for use. When put on the table, if possible use a cozy, which is a wadded cover made to fit closely and entirely over the pot, and is a great help in keeping the tea hot.

Never allow tea to boil or to draw too long a time. Both tea and coffee are greatly improved by being thoroughly heated before wetting.

You must be yet more particular in the case of coffee: it must be even more jealously guarded from the air. In purchasing coffee, the best mixture is two parts Java and one part Mocha. Maracaibo is too coarse and rank to suit most palates, although the three mixed in equal parts

(*Continued on page* 516.)

Maid for easy Housework.

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Beware Peddlers and some unscrupulous grocers will tell you, "this is as good as" or "the same as Pearline." IT'S FALSE—Pearline is never peddled, and if your grocer sends you something in place of Pearline, do the honest thing—*send it back.*

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Numismatic Bank, Boston, Mass.

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(*Continued from page* 515.)

is liked by some. A little chicory is a great addition to coffee. The French, so famed for their excellence in this beverage, always use it; but the Americans are apt to be too generous with it. As with garlic, unless you are sure of the correct proportions you had better let it alone.

Allow a heaping tablespoonful of finely ground coffee to each cup, and put it into a bowl. Wash an egg in cold water, then break it, shell and all, into the coffee, and stir until every grain is wet with the egg. Scald out the coffee-pot, put in the mixture of coffee and egg, and the necessary amount of boiling water, cover tightly, and if possible stop up the nozzle with clean paper, that none of the aroma may escape. Let this boil for five minutes, then put it on the back of the range where it will keep hot but not boil, and let it stand ten minutes to settle. Pouring in half a cupful of cold water will expedite the settling. Before using, pour out a little in a cup, to free the nozzle of any grains which may have lodged there, then your coffee will be ready to serve. It should pour as clear as amber, and be strong. Well made coffee does not need a strainer.

There are seasons when eggs are dear, and to use one each time coffee is made is found rather expensive. Half an egg will generally do the work. Break the egg in a glass, beat it until white and yelk are well mixed, fill the glass with water, stir until all are well blended, then use half of the mixture at a time. Should you simply divide the egg, you would run the risk of finding the remaining half so hard as to be useless when you wish to use it: adding the water, which keeps out the air, will prevent this. A still more economical plan is to save all your egg-shells: three or four of these will clear a quart of coffee. Be sure that the eggs are well washed, otherwise the shells are unfit for use. Always *scald* your milk for coffee; *boiled* milk impairs the flavor.

Iced tea and coffee are very refreshing in summer. Prepare both the same as directed above, and serve hot with chipped ice in the cup, either with or without sugar and cream or milk. If economy of ice be an object, make the tea or coffee in the usual way, allow it to cool, then set

(*Continued on page* 517.)

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One of the best signs of the times in the matter of dress, is the attention which is lately being paid to hygienic underwear for ladies and children. Most important of all is the underwaist, which allows perfect freedom of movement, does not press heavily upon any vital part, and gives the wearer grace and suppleness. THE DOUBLE YE WAIST, which is made in all sizes and styles from infants to ladies, and in great variety of texture, is the best garment of the kind which has been produced, and ladies are certain to be pleased if in ordering for themselves, or their growing children, they make sure of getting this popular garment.

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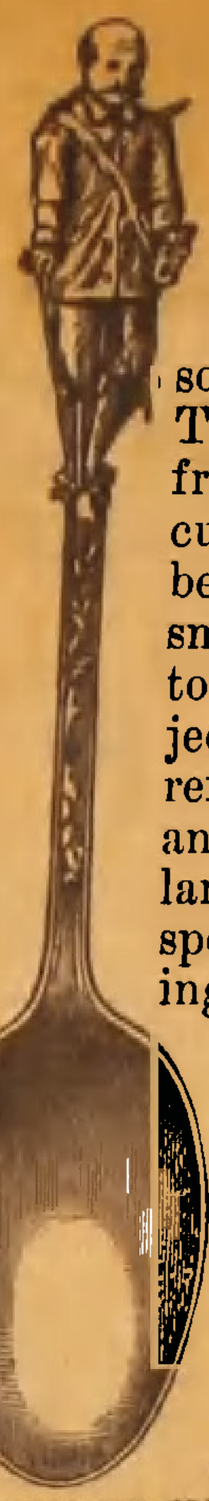

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