## Medicine

## **Test-Tube Baby**

Conceived in a laboratory

dearest wish." That sentiment has surely been voiced by many an expectant parent, and Gilbert John Brown, 38. a British truck driver, is no exception. His wife Lesley, 30. is scheduled to give birth shortly. All that seems commonplace. But the birth of the Browns' baby may well be the most sensational obstetrical event since the birth of the Dionne quintuplets in 1934. Reason: the child will be the world's first baby conceived in a test tube.

Under normal circumstances, pregnancy occurs when an ovum, or egg cell. released by a woman's ovary during ovulation is fertilized in the fallopian tube by a single sperm that has traveled up from the vagina. After the fertilized egg undergoes a number of cell divisions. the tiny clump of cells enters the uterus. where it burrows into the wall and develops until birth. But the Browns, married nine years, had been unable to conceive a child because of Lesley's faulty fallopian tubes. "Three years ago." Lesley says. "we were told that there was no chance that I could ever conceive.

Then, as a last resort, the couple went to Gynecologist Patrick Steptoe of Oldham General Hospital and Cambridge University Physiologist Robert Edwards, a highly respected pair of researchers who for more than a decade have been conducting painstaking experiments on in vitro (Latin for in glass) fertilization.

Details of what Steptoe and Edwards did to help the Browns are still sketchy. But published reports on their previous work indicate that they probably took the following course: sometime last November. Lesley Brown was given hormonal injections to stimulate maturation of her egg cells. Then, through a small

incision in her abdomen, the doctors removed one or more eggs from the ovary. placed them in a laboratory culture medium and exposed them to her husband's sperm. At least one egg was fertilized. and the resulting conceptus began to divide, first into two cells, then four, then eight, and so on. A few days later, the conceptus had reached the blastocyst stage: an aggregate of cells in the form of a hollow sphere. Ordinarily, fertilization and this initial division would take place as the egg traveled through the fallopian tube to the uterus. Thus it was at this point that the laboratory conceptus was introduced into Lesley Brown's womb.

Over the years. Steptoe and Edwards have tried this basic technique on a number of infertile women, but Brown is the only one to have carried her baby so close to full term. One British newspaper reported that at least another six women are expecting lab-conceived children within two months. Drs. Steptoe and Edwards say that the Brown "pregnancy is progressing well," but until the baby is born no one can be sure that it is normal.

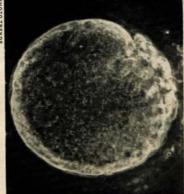
If the technique produces a healthy infant and is repeatable, it will be a boon to many childless couples. But it will also intensify debate on the ethical implications of tampering with nature. Some observers are sure to see in the world's first test-tube infant visions of the baby hatcheries in Aldous Huxley's Brave New World.

The expected birth has already become a press circus. World rights to the couple's story and pictures of the baby have been auctioned off to the highest bidder. Britain's Associated Newspapers Group Ltd., for an estimated \$565,000.

As the birth watch began, the strain was beginning to tell on John Brown. Said he: "I didn't know we were to be the first, and if we are. I wish we weren't. God. I wish it were all over." For the Browns—mother, father and child—it is only the beginning.



**Gynecologist Steptoe and Physiologist Edwards** 



**Human egg after fertilization** 

The most sensational obstetrical event since the Dionne quintuplets.

## **Costly Hoax?**

Scientist sues over clone book

the author assures us it is true. We do not know." Despite this weak disclaimer, J.B. Lippincott Co. last March published In His Image as nonfiction. The book, though dull and error filled, stirred immediate controversy by claiming that a baby boy cloned from an eccentric aging millionaire (and thus his genetic duplicate), by a doctor named "Darwin," was alive and well. Had Lippincott checked with any of the reputable scientists quoted in the book or even with the editors in its own medical book division. it would have known that the story was probably fraudulent; experts agree that no mammal has yet been cloned. Instead, the publisher depended entirely on the word of Author David Rorvik, a little-known freelancer whose credentials include naive articles about psychics and faith healers, and newsletters supporting the quack cancer drug Laetrile.

Now notice has been served on Rorvik and Lippincott-and. indirectly, on other authors and publishers—that it may well be costly to print as fact books that are fictitious or, even worse, hoaxes. Charging that Rorvik and Lippincott have done just that. Oxford University Geneticist J. Derek Bromhall last week filed a \$7 million libel suit against them. Bromhall, a respected scientist, notes that he would not have brought suit had Image been published as fiction. But as nonfiction, he says, the book has "defamed" him by quoting from his research "so as to create the impression that Bromhall was cooperating or in some way had helped and was vouching for the accuracy and credibility of the book." His suit, filed in U.S. district court in Philadelphia (Lippincott's headquarters). makes a further and novel demand; it seeks a court order forcing the author and publisher to admit that the book is "a fraud and a hoax" and that "no cloned boy exists.

Bromhall says he first heard of Rorvik in May 1977, when the author wrote to him saying. "I am working on a new book and wish to discuss in it some of the prospects of mammalian cloning. Bromhall promptly replied with a ninepage abstract of his doctoral thesis on cloning. But when Image was published, Bromhall found to his great surprise that the birth of the cloned boy had supposedly occurred five months before the date of Rorvik's letter. "If Rorvik's story were true," says Bromhall, "then by the time he wrote to me, he and 'the Darwin team' knew more about human cloning than anyone in the world. Then why did he ask my advice? The whole thing is so obviously untrue. We just must not allow this sort of hoax to pass by.