

There is potentially a revolution for stock breeders in the making, although the experts warn that the cattle ova transplantation work is a long way from practical application just now. The farmer is going to benefit from the egg transfer method of birth by what the geneticists learn about fertility and other biological factors in applying it experimentally.

Transplant Ovaries Also

Why be content with transferring mere eggs from mother to proxy mother? Transplantation of the whole female sex organ, the ovaries, has been accomplished in the dog, with the result that one breed of dog can become the proxy mother of puppies unrelated to her. Dr. Leon F. Whitney, a geneticist-veterinarian of Orange, Conn., has done this. There are interesting possibilities in this technique, aside from the question of how to register the pure-blooded puppies whelped by a foster mother.

Working with Dr. Harry S. N. Greene of Yale, Dr. Whitney found that worn-out ovaries of older dogs were actually rejuvenated when transplanted to a young dog. A champion dog might have puppies by this method years after she herself is dead.

Applied to human beings, this ovary transplantation suggests that a young woman could give a new vigor and span of usefulness to an old woman's sex organs and give birth to the older woman's children.

Less radical would be the application to human beings of the egg transplantation method. Women who cannot have children because they are infertile might undergo ova transplantation and experience a foster motherhood in this way. Or women who want children of their own heredity and desire to dodge the burden of childbearing and birth could arrange to have some willing female receive and nurture her hereditary progeny. The process would be more complex scientifically and practically than the artificial insemination that is now used among humans under medical supervision.

But this is only natural. The female is more complex than the male so far as reproduction is concerned. Biologically, the woman has more hereditary burdens than the male of the species.

Science News Letter, April 21, 1951

MILITARY SCIENCE

Sniperscope Spots Enemy

➤ AMERICAN SOLDIERS in Korea are seeing prowling enemies in the darkness of night with the same device with which they saw prowling Japanese during the latter part of the war in the Pacific. It is the so-called sniperscope, a rifle attachment which reveals the prowlers by invisible infra-red radiation.

The sniperscope being used in night-fighting in Korea today is an improved type, details of which are not revealed. But the Army has disclosed that it is now standard equipment for infantry divisions in Korea and that it is in quantity production. It operates, however, on the same general principles as the older models.

The night-fighter using the sniperscope carries a six-volt battery and vibrator on his back which powers the device. On the gun is a tube in which infra-red radiations are generated and beamed to the front in the direction in which the rifle is pointed. These infra-red, or heat rays, are reflected back from an object encountered just as ordinary light rays are returned, making the object visible.

The returning infra-red rays are invisible, but they are picked up by a telescope on the barrel of the weapon and passed into a tube in which the invisible image made is converted into one that is visible. When the infra-red rays strike the image tube, electrons are released which are in direct proportion to the intensity of the rays. These electrons pass to a fluorescent screen, producing a visible image.

A version of the sniperscope called a snooperscope was used during World War II attached to helmets of soldiers or to trucks to enable drivers to detect obstacles in the path ahead. It was also used to detect enemy tanks and other war equipment at night. The Nazis had a detection device of the same sort. It was called a "heat-eye tube," and was used in trucks and tanks but never refined, as far as is known, for use as a rifle or helmet attachment for use of the foot soldier.

Science News Letter, April 21, 1951

INVENTIONS

Patented Device May Out Honeybee as Pollen Carrier

➤ THE HONEYBEE may lose its job in carrying pollen from one blossom to another in the fruit orchard, replaced by a man-operated device which can spray pollen gathered from a selected tree to the blossoms on others.

To use the device, the operator does not need to climb the tree being pollinized. The sprayer is at the end of a pole, so that pollen can be distributed without leaving the ground. A blast of air, either from a manually-operated bulb or from a compression tank, dispenses the pollen from a container on the tubular device. Inventors are Ira A. Marchant and Edwin P. Johnson, Oroville, Wash., and the patent is 2,548,487.

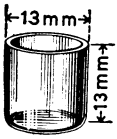
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