For the purpose of making vaccine, heifers three to six months of age are selected and are isolated for observation for at least a week. Young animals are chosen, for the reason that their skin is finer and more delicate, and also because they are much easier to handle.

When an occulation is to be performed the calf is led to the operating-room, strapped to the tilting-table, and in a few moments is ready for the operation. The hair is cut very close over the abdomen and upper femoral regions and is then very carefully shaven and scrubbed with soap and water, leaving the skin looking beautifully pink and soft.

The operator and his assistants don their white duck suits and scrub up. All but the prepared portion of the animal is covered with a clean sheet and towels, and then, with a sterile scarifier, a large number of abrasions are made over the bared area. These scarification are probably an inch to an inch and a half long by an inch wide, and reaching down to the rete Malpighi, just so as not to draw blood. At least one hundred to one hundred and twenty of these are made, the calf apparently not much discommoded

The inoculation of a sterile glycerine virus is made, avoiding the reproduction of extraneous organisms as always occurs where the virus is carried from animal to animal by large points or spades, as they are called. Shortly after the spots are thoroughly impregnated the calf is returned to the stable.

For the next four or five days, or until the vesicles are well formed, the calf is apparently well and, apart from an occasional elevation of temperature (rarely exceeding 1 degree), has a good appetite and acts perfectly well.

By the fourth or fifth day, as stated before, this virus is collected. The calf is brought again to the operating-room and placed upon the table.

The points that surprised me were the appearance of the vesicles; they were formed along the course of all the lines and cross lines of the scarifications, and the total absence of any inflammatory areola. Here and there, between the scarifications, could be seen isolaled and typical umbilicated vesicles. Sometimes the inguinal glands are found enlarged, but there was no pus visible to the naked eye. With a sterile "Volkmann" sharp spoon the vesicular growth is removed from all the scarifications and placed in a sterile jar. This pulp is found to contain streptococci and staphylococci.

The removal of the pupl allows to exude in greater or less quantity, according to the size of the vesicles, serum; "ivory points" are covered with this, allowed to dry and are ready for use.

After all available serum is collected the calf is released from the table and returned to the stable, where she remains for several days; later, the calf is allowed its freedom in a corral and by the end of two weeks is sent home to its owner in prime condition, having spent about four weeks on the vaccine farm.

The further history of the pulp is this: It is weighed, thoroughly triturated wit a certain quantity of glycerin, placed in a sterile culture-tube, sealed and stored in a refrigerator. A culture of this glycerinated