

THE USE OF VACCINE.

- (1) Sterility and effectiveness is the first factor.
(2) No means as yet have been found to preserve the vaccine. Its use therefore is recommended within three days of its being made.
(3) Vaccine should be kept in a cool place, and — if possible



The heads of two towels, both of which were bodily affected with chicken-pox and diphtheritic rash. A was taken previous to vaccination, and B shows one of the blisters five weeks after the second injection.

- (14) When using, the vaccine should be kept in two bottles - One, a wide-mouth bottle from which the vaccine may be taken quickly.

(15.) A hypodermic syringe of 6 or 12 cc. capacity is best suited for the work.

(16.) Needles 16 or 18 gauge, from 2 to 2½ inches long should be used.

(17.) Two doses of 1 cc. are given five to seven days apart.

(18.) Subcutaneous vaccination is followed by injection under left wing. The exposed skin should be cleaned by using a piece of cotton saturated with some good disinfecting solution.

(19.) One man and helper can easily handle and vaccinate 150 birds in an hour.



Both these illustrations show the peg-solids on the cards.

CONCLUSION.

Flocks were vaccinated by the writer numbering approximately 34000 birds, ranging from five weeks to three years in age. No bad effects were noticed in any one case, though there were three deaths due mainly to emaciation before the injection.

Control birds were left in each flock, of which 10 per cent. died.

Egg production was not affected in any way, more than the handling of the birds would cause by vaccination.

Some flocks were vaccinated with vaccine made from seals only. Others were vaccinated from vaccine made from seals and chrysanthemum. Some were vac-