feet wide and two feet high.

The hutch can be constructed of scrap lumber, used chicken wire, and old crates. If it is to be left in the open, the roof should be covered with tarpaper which overhangs the wire below. For convenience, a wooden frame should be made for the wire door in front.

The hay can be kept in a Y-shaped manger made by nailing a few slats between one side and the roof. An empty tin for water should be nailed to another side. Very professional looking containers for the food can be made out of a five-gallon oil can if you have one handy. The hutch should be placed where it is protected from the wind, such as by the side of the house or garage.

## Keep Hutch Clean

The hutch should be kept clean. If the floor is solid, a scraper can be made by nailing a flat piece of tin to a wooden stick. With this hay, which has fallen on the floor, unused feed and droppings may be easily removed. Floors which will be less trouble to clean, can be made by placing inch slats a half inch apart. These spaces let the soiled hay and other refuse drop through. Trays should be placed underneath and cleaned periodically.

Inexpensive nest boxes for the young rabbits may be made of nail kegs with ventilation holes added, or from apple boxes.

Proper feeding and cleanliness are the most important precautions to take against disease. If you keep the hutch clean, and change the water and feed regularly, the chances are that you won't be bothered by sickness in your rabbitry.

One final word of warning. Don't treat your rabbits too much as pets. They are very interesting creatures, and children are likely to become particularly fond of the white ones. But if you are planning to use them to supplement your meat supply, you don't want to become too attached to them. It might be a good idea to buy a white rabbit for the kids to center their affections on, and a breeding stock of colored ones, for straight-out eating purposes.

Directions for preparing the meat are given in a free booklet distributed by the U. S. Rabbit Experiment Station at Fontana, Calif. This booklet also answers other questions which may arise concerning rabbit raising.

Science News Letter, April 24, 1943

Fish, it is claimed, has better flavor if killed and bled immediately after being caught.



AT HOME—These rabbits are in a very fine set of hutches; the beginning rabbit raiser can start out more modestly with an old packing box.

MEDICINE

## Yellow Fever Shots Safe

More than 600,000 doses of new type vaccine are released with no unfavorable reactions reported. Must pass four rigid tests.

MORE THAN 600,000 doses of the new, aqueous type yellow fever vaccine, which the Army has adopted for protection of troops going into yellow fever regions, have now been released without jaundice or any other unfavorable reactions having been reported, the U. S. Public Health Service announced.

This type of vaccine, which the Public Health Service has been making at its Rocky Mountain Laboratory since 1941, is a distilled water extract of 10-to 11-day-old chick embryos which have been infected with a suitable strain of yellow fever virus, Dr. M. V. Hargett, Dr. Anthony Donovan and H. W. Burruss explain in Public Health Reports.

Previous widely used yellow fever vaccine was made from an extract of the infected chick embryos in non-immune human serum.

Each lot of vaccine must pass four rigid control tests before being released for human use, the Public Health Service scientists state.

There must be no sign of contaminating germs. There must be a minimum of 66,000 minimum lethal mouse doses of virus per milliliter of vaccine. None of a series of three guinea pigs inoculated with the virus may show illness or more than a very slight rise in temperature during two weeks following injection. Finally, a test monkey must show lack of neutralizing bodies for yellow fever virus in his blood before vaccination and presence of such neutralizing bodies after vaccination. The lot of vaccine is discarded if it fails to pass any of these tests or if the test monkey develops paralysis or dies after vaccination, regardless of the cause of his death.

Science News Letter, April 24, 1943

Some 50,000 foreign patents, many of which are of interest to chemical, mining, and engineering industries, are available to American manufacturers from the Alien Property Custodian, Washington, D. C.