

the chicks can be much reduced by this method. As soon as the weather moderates, however, it is very desirable that the chicks be placed out upon the open range.

The house in the illustration is 8 x 16 feet, and will hold four hovers, with a capacity of fifty chicks in each. This can be utilized as a breeding-pen, laying-pen, or cockerel-pen later on. Twenty or twenty-five birds can be easily accommodated. This house can be readily moved by a team of horses. The advantages of the colony-house brooding system over the permanent continuous brooder-house are that no



Combination colony brooder-house, breeding or laying pen. The house in illustration is 8 feet deep and 16 feet long, and will accommodate up to 300 chicks; is built upon two 4 x 4-inch runners, and has two sliding windows in front. Can be used as a primary brooder till chicks are past the danger-point, i.e., the first fourteen days; and they can then be removed to colony houses on free range. When used for this purpose, the house can be stationed close to farm buildings and enable rancher to pay more attention to chicks with less labour and time than when they are out on free range.

permanent wire fencing is needed, except a small portable fence of 2-foot $\frac{1}{2}$ -inch mesh wire, to be used for a day or two when the chicks are first put in the brooder; they can be moved to any part of the ranch, thus giving the chicks the benefit of clean virgin soil and free range. On the other hand, a hot-water pipe brooder-house can only be used during the hatching season. It is generally not suitable to place half-grown or mature fowls in, because of the danger from lice, red mites, or disease, and lack of sufficient ventilation for large fowls.

An illustration is given of a combination colony house that can be used with an individual hover in rearing young chicks or for growing stock upon the open range. In the winter-time it may be used for a laying-house. This house can be closed during early spring work for rearing young chicks, and ventilation secured through a cloth screen, which can take the place of the tight-board shutter as seen in the illustration. When used for growing stock or laying hens, the windows and screens are opened, so as to make it practically an open-front colony house. The colony houses may be put upon runners, so as to be drawn readily from place to place. The colony house should not be less than 6 x 6 feet, 6 x 8 feet, or 8 x 10 feet in size. Permanent colony houses are usually 8 x 16 feet in size.

After the chicks are a month old, the house can be raised up about a foot from the ground, providing splendid shade for the chickens, and also preventing rats or vermin from sheltering underneath.

Where chicks are raised on free range in this fashion, the labour of daily feeding can be dispensed with by means of hopper-feeding. A large barrel or cask can also be utilized to hold a sufficient quantity of water to last for several days. A sprinkling of permanganate of potash crystals now and again will keep the water in good condition.