

## TURN SURPLUS COCKERELS INTO CAPONS



Many farmers and poultry fanciers have found it profitable to turn all their surplus cockerels into capons by altering or castrating them; others think they can do better by selling the cockerels as broilers as long as prices hold up and caponize only later-hatched chicks.

The capon or castrated rooster bears the same relation to a cockerel that a steer does to a bull, a barrow to a boar, or a wether to a ram. As with other male animals so altered, the disposition of the capon differs materially from that of the cockerel. As a result of the more peaceful disposition of the capon he continues to grow and his body develops more uniformly and to a somewhat greater size than is the case with a cockerel of the same age.

### Time to Caponize.

In so far as the effects of the operation and the rapidity and ease of healing are concerned, the time of year when the operation is performed is of little importance. The age and size of the cockerel, however, are very important. As soon as the cockerels weigh two to three pounds, or when two to four months old, they should be operated upon.

### Operation of Caponizing.

Before beginning the operation two conditions are absolutely essential. If these are not favorable, do not attempt to operate. The first of these is that the intestines of the fowl should be completely empty, so that they will fall away and expose the testicle to view. This can be accomplished by shutting up the fowls and withholding all food and water for twenty-four to thirty-six hours before the operation. Thirty-six hours is better than twenty-four, especially for a beginner. The second condition is a good, strong light, so that the organs of the fowl may be clearly and easily distinguished. Direct sunlight is best for this, and in consequence it is well to operate out of doors on a bright day.

### Methods of Holding the Fowl.

When ready to operate, catch the bird and pass a noose of strong string about the legs. Do the same with both wings close to the shoulder joints. To the other end of the strings are attached weights of sufficient size to hold down and stretch out the bird when placed upon the head of a barrel or box of convenient height, which is to serve as operating table.

Having fastened the fowl, be sure that all the instruments are at hand. It is also well, though not necessary, to have ready some absorbent cotton and a dish of water to which has been added a few drops of carbolic acid. Having once started, carry the operation through as quickly as possible. Moisten and remove the feathers from a small area over the last two ribs just in front of the thigh. With the

left hand slide the skin and flesh down toward the thigh. Holding it thus, make the incision between the last two ribs, holding the edge of the knife away from you as you stand back of the fowl. Lengthen the incision in each direction until it is one to one and a half inches long. Now insert the spreader into the incision, thus springing the ribs apart. The intestines will now be visible, covered by a thin membrane called the omentum. Tear apart this membrane with the hook, and the upper testicle, yellow or sometimes rather dark colored and about the size and shape of an ordinary bean, should be visible close up against the backbone. By pushing aside the intestines this can easily be seen, and the lower one also, in a similar position on the other side of the backbone. Expert operators usually remove testicles through one incision. Inexperienced operators will usually find it well to attempt the removal of the upper or nearer testicle only and to make a second incision on the opposite side of the body for the removal of the other testicle.

If both testicles are to be removed through the same incision, remove the lower first, as the bleeding from the upper might be sufficient to obscure the lower. Each testicle is enveloped in a thin membrane. This may be and probably is best removed with the testicle, though some operators tear it open and remove the testicle only.

The delicate part of the operation is at hand, due to the close proximity of the spermatic artery, which runs back of the testicle and to which the testicle is in part attached. If this is ruptured the fowl will bleed to death. The cannula, threaded with a coarse horse-hair or fine wire. Allow the hair or wire protruding from the end to form a small loop just large enough to slip over the testicle. Work this over the testicle, being careful to inclose the entire organ. Now tighten up on the free ends of the hair or wire, being careful not to touch any part of the artery. If the spermatic cord does not separate, saw lightly with the hair or wire. When the testicle is free, remove it from the body. If only the upper testicle has been removed, turn the bird over and proceed in exactly the same manner upon the other side.

After removing the testicle, if the bleeding is at all profuse it is well to remove a portion of the blood by introducing small pieces of absorbent cotton into the body by means of the hook or nippers, allowing them to become saturated and then removing them. Be sure to remove all blood clots, feathers or other foreign matter. After the testicles and all foreign matter are removed, take out the spreaders, thus allowing the skin to slip back over the incision.

## SONG SPARROW AN OPTIMIST

Cheery Bird, Permanent Resident, Asks Little for Services, Which Are Valuable.

The song sparrow, cheery-voiced forerunner of spring, is the subject of an article by Miss Harriet E. Bancroft, which appears in the Ohio Arbor and Bird Day Manual, issued by the state department of public instruction for use in the schools. In telling about the song sparrow Miss Bancroft says: "There are so many different kinds of small, sober-hued birds, which look alike, and yet are not alike, that you wonder how you are to distinguish this one from the others. Each bird has his recognition mark and song sparrow's is the spot in the middle of his speckled breast; and while in color he is of the earth, earthy, and bears upon his breast a spot, you must not think that these are the outward signs of an inward blemish, because he hasn't any.

"There is great variation in the habits of different sparrows with respect to migration. The tree sparrow is with us only in winter, the field sparrow is a summer bird, the white-crowned migrant; that is, he pays us a short visit in the spring and again in the fall, while on his way to more remote regions; but song sparrow is a permanent resident in nearly all parts of the state. He shares with us the storms as well as the sunshine of the rounded year.

"His cone-shaped bill tells you that he is a seed-eating bird and the weeds yield him a plentiful supply of them. He also eats slugs and worms and ground-inhabiting insects when they are to be had, and his choice of diet makes him a valuable assistant to the farmer. He helps him in his warfare on troublesome weeds and harmful insects.

"It is not too much to say that whoever or whatever helps the farmer to grow better crops, helps the whole world along; but song sparrow's services do not stop here; his finest is that which he renders to our weary spirits when he cheers them with his song. For all the help he gives he asks nothing in return but the privilege of living out his little life unmolested.

"It is said that he and his mate will raise three and even four broods in a season, if the weasels, the red squirrels, the cats, the crows, the hawks, the blacksnakes and other ill-disposed creatures do not harry their lowly nest, which distressing occurrence is all too frequent."

### Water for an Army.

One of the numberless tasks of the general staff of a great army is to provide water for the soldiers and the horses. The Scientific American describes some of the methods employed. Only running water is used. In the German army the upstream water is used for drinking, and the downstream water for watering the horses and for bathing. Suitable signs notify the men which water they may safely drink and which they may use only for bathing. In shallow or narrow streams basins are dug or small dams built, in order to form reservoirs of sufficient size. Stepping-stones are put down so that no one need walk through the water, and the banks are shored up with boards to keep them from crumbling into the water. Basins are dug at which to water the horses; when troughs have to be used, they are supported on posts and filled by means of pumps. If water lies at a reasonable depth from the surface—that is, not more than twenty feet—pipes are driven that, according to their size, deliver from four to twenty-five gallons of water a minute. If the water lies very near the surface, a hole is dug, and a cask, the bottom of which has been knocked out, is put into the hole to hold the sides in place and to protect the water from dirt. If the water lies at a greater depth, box sections are driven in, one on top of another, to the required depth.

## CLING TO BLEAK LAND

NATIVES OF SHETLAND ISLAND LOVE THEIR HOME.

Have Hard Work to Coax a Living From Almost Barren Rock, But Leave It Unwillingly—Spot Has Figured in History.

Fair Island, 25 miles south of all the other Shetlands, has had a strange enough pageantry passing over its rocky surface. For not only was it the home of the Picts, and then of the Norse; and for the Norse, the signal beacon to give warning of the coming of the hostile sail; besides that, it supplied a chapter in the romance of the Spanish Armada.

For here was wrecked the ship of Don Gomez de Medina, and that noble and his men were for a time most generously entertained by the islanders, writes Maude Radford Warren in Harper's Magazine. But time passed, the Spaniards stayed, the meal and the mutton diminished. Then the islanders, wrapped in by the wild storms, unable to get to any other island, fearful of famine, hid their food. The forced guests grew weak, many died of starvation, and some, it is said, were pushed over the tall cliffs into the sea.

At last one Andrew Umphrey took the Spaniards away in a ship, and since that day the name of Umphrey has been powerful in the Shetlands.

The Fair Island people show plain traces of Spanish blood, but they resent the suspicion of it, saying that the Spaniards were isolated when on the island.

It is hard to conceive how isolation could well be possible on an island two miles square; besides, the Fair Island people do not deny that the strange patterns and the lichen dyeing of the stockings and caps and shawls their women knit were taught them by the Spaniards, and indeed the same sort of handicraft is found to this day in country places of Spain.

The Fair Islanders were great smugglers in the old days, and they are still good bargainers. They are very intelligent, seeming to know instinctively how to read; and not so very long ago they would follow the mail steamers in their light canoe-shaped boats, which none but themselves can manage, begging for newspapers and books.

One of their terrors is of infectious disease; another is of the dog-tax man, against whose coming they are said to hang and drown their dogs; another is of emigration, for they love Fair Isle. Yet emigrate they must; about forty-five years ago a hundred of them went, unable longer to coax a living from their bare rock. Their greatest joy is the occasional visits of the minister, more frequently now than in the old days, when he arrived but once in about two years to marry and christen. He preaches every day of his stay, and they prolong his visit on every possible pretext, using, when all else fails, the solemn prophecy of a storm.

### Bad Points in All of Us.

Better for you to present some of the good points and features of the one under discussion if you do not want him to show up some of your bad points some day. You have them. Everybody has them. We are all human and the perfect man does not exist.

### Fan Is Run by Alcohol.

A fan has been perfected that runs with alcohol. A little lamp operates it by heating air in a cylinder. The expansion and contraction of the air is ingeniously utilized to provide the motive power for the fan. Remarkable results have been obtained according to the company manufacturing it.