

with chronic cough, the primary cause of which in one case was supposed to be diseased liver, in another diseased lungs. It mitigates, and sometimes effectually checks a fit of coughing."

The method most commonly adopted in preparing this fruit for daily use, is to cut them in slices and serve them with salt, pepper and vinegar, as you do cucumbers.

To stew them remove them ripe from the vines, slice up and put them in a pot over the stove or fire without water. Stew them slowly, and when done put in a small piece of good butter and eat them as you do applesauce.—Some add a little flour bread, finely crumbed, or a couple of crackers pulverized.

The tomato is a fruit very easily raised. If the seed be sown in May, in good, rich soil of warm nature, with a sufficiency of old, well rotted manure, there will rarely be any danger of failure. When the vines begin to leave, they should be provided with a trellis, or tied to stakes fixed in the soil, to keep the fruit from being injured by coming in contact with the dirt.

REQUISITE POINTS IN FOWLS FOR BREEDING.

Much judgment is required in propagating all kinds of stock with a view to improvement; still, accident sometimes favors our designs and a hap hazard course may occasionally result more favorably than well conceived judgment, though generally proving a hodge-podge affair.

There are certain points in all animals that must be fully developed in their conformation to constitute them perfect in form, strong in constitution and well adapted for the object to which the particular species are appropriated;—hence, the most perfect form of each respective kind to breed from, should be selected, which, too should be sound and healthy, and to insure a certain description of offspring it is necessary to breed from those of a positive character—all of which is quite as applicable to poultry as any of the domestic animals.

The breeder should first endeavor to inform himself fully, that he may select his stock with judgment as to their real merits.

In calling attention to the requirements of stock fowls (those to breed from) I will state the points I consider of so much importance as to be strictly adhered to in all my selections to breed from, and absolutely necessary to obtain first class birds of every breed.

The Asiatic varieties are inclined to too much length of legs, increased by injudicious breeding; great height has been too much the object with many breeders and I am surprised to see at this day when proper selections can be made, so much importance attached to that point. The birds, best proportioned and most perfect in form should always be preferred to those of great size when inferior in the most essential points.

I have now in my yards those varieties whose rear feathers trail moks when walking in the snow an inch deep. The cocks with no longer legs than a due proportion to size of body.

If imperfection must unavoidably exist in either parent, my experience has proved it should be in the hens. They have the greater influence in imparting the size, to the progeny but stamp them with the characteristics of the male.

It is requisite a breeding cock should be long from his eyes to point of bill, and that strong and heavy which is evident at an early age—the eye large and full. A short, round-headed cock is a dull inanimate bird, like the owl, his prototype in that feature. His neck should be thick and stiff—broad, deep, full and projecting. Thighs should be somewhat long but heavily muscled, a point which should not be overlooked—the legs of good size, but very important they should be short and standing perpendicular, and by all means wide apart. The particular form and position of the legs I consider among the most important points to be observed; without that proper formation a bird is generally deficient in others. I have never seen one with good legs but what his general form corresponded. When of proper dimensions the sustain they body erect, give symmetry, with loftiness and activity. A long shanked fowl is generally knock-kneed—awkward gaited and of frail constitution—a clumsy treader—horribly mangling the hens' backs. He should be broad and flat across butts of wings, back short, and somewhat depressed, by the tail being high set up. A long hump back is frequently found in connection with a long shanked "critter," possessing a lank chest and badly feathered, destitute of all worth except to make Homœopathic broth, having scarcely vitality sufficient to keep him alive and the sooner that fails him, the better for his owner, unless no better could be procured, or his Harem is composed of the most perfectly formed hens. His crow should be long and shrill, which gives evidence of full developed lungs, a sure test of strong vitality. Without a full capacious chest, neither man, beast or bird possesses a strong constitution, nor will they take on fat readily. Color is a mere matter of fancy, though the dark hues are considered the most hardy; however, the plumage should be decided and brilliant. The hens should possess the same peculiarities of conformation as the cocks, and if breeders will attend to the above requisites and to making crosses yearly, they may depend on having choice birds, possessing length, breadth and depth of carcass, good constitution, full meat, firm, stately step, will fatten readily and of the most productive qualities.—*Farmer's Companion.*

detail. Then procure a young, healthy, but mature female approaching as nearly to this ideal picture as possible. Carefully examine in what respects she is deficient, and find a male of the same breed, *proportionally* smaller than herself, with her good qualities, but most especially *excelling where the female is faulty*. This is of the utmost importance. Let the male be somewhat the eldest, but not very much so. While the female is pregnant, feed her well with food rich in albumen, gluten, and the phosphates, but prevent her from becoming fat. When the young is born, increase the mother's food, and add more *carbonaceous* (starchy or oily) matter to it. When the young can eat, and particularly during the first winter, give abundance of green nourishing food, and ground oats or buckwheat, in preference to corn; and unless some accident happens, you are morally certain of having a very superior animal. The only chance of failure is where the parents are *mongrels* or grades; or where the female has before (especially for her first offspring,) bred to an inferior male, or one of markedly different blood from herself. In mixed, or grade blood in the female, you never can be certain that she may not breed back to some very worthless ancestor, generations before; but even in such a case your chances are in favor of success. If you go to much expense to procure a valuable male, never depend on a female with whose previous history you are not acquainted. Much better use one that has never given birth before; even if she is not quite as perfect as the other. This, *practically*, is a very important rule. To these directions the whole secret of successful breeding among established races seems to depend. If you are ambitious to form a new breed, like Collins or Bakewell, you must study the matter out for yourself; for these gentlemen never gave any account of their management; and they probably owed as much to "luck" as to intention. In crossing two very distinct breeds, as the Merino and Leicester sheep, or the cart-horse and Race-horse, much more experience, and knowledge are requisite, if any good can come of such direct crosses.—*Farmer's Companion.*

THE SECRET OF BREEDING FINE STOCK.
Form a correct idea in your mind of the sort of animal you wish for, studying it in

detail. Then procure a young, healthy, but mature female approaching as nearly to this ideal picture as possible. Carefully examine in what respects she is deficient, and find a male of the same breed, *proportionally* smaller than herself, with her good qualities, but most especially *excelling where the female is faulty*. This is of the utmost importance. Let the male be somewhat the eldest, but not very much so. While the female is pregnant, feed her well with food rich in albumen, gluten, and the phosphates, but prevent her from becoming fat. When the young is born, increase the mother's food, and add more *carbonaceous* (starchy or oily) matter to it. When the young can eat, and particularly during the first winter, give abundance of green nourishing food, and ground oats or buckwheat, in preference to corn; and unless some accident happens, you are morally certain of having a very superior animal. The only chance of failure is where the parents are *mongrels* or grades; or where the female has before (especially for her first offspring,) bred to an inferior male, or one of markedly different blood from herself. In mixed, or grade blood in the female, you never can be certain that she may not breed back to some very worthless ancestor, generations before; but even in such a case your chances are in favor of success. If you go to much expense to procure a valuable male, never depend on a female with whose previous history you are not acquainted. Much better use one that has never given birth before; even if she is not quite as perfect as the other. This, *practically*, is a very important rule. To these directions the whole secret of successful breeding among established races seems to depend. If you are ambitious to form a new breed, like Collins or Bakewell, you must study the matter out for yourself; for these gentlemen never gave any account of their management; and they probably owed as much to "luck" as to intention. In crossing two very distinct breeds, as the Merino and Leicester sheep, or the cart-horse and Race-horse, much more experience, and knowledge are requisite, if any good can come of such direct crosses.—*Farmer's Companion.*

FEEDING AND REARING OF CATTLE. BY C. W. JOHNSON.

Let the keeper of live stock remember that the food of cattle requires a certain bulk—the stomach requires a certain mechanical stimulus, which the bulk of the food naturally imparts to it. *Occasional over feeding* produces derangement of the digestive organs, hoven, and diarrhoea; *habitual overfeeding* produces an enlarged liver, puerpelal fever, black-quarter, and other diseases. *Deficient food*: animals, even before birth, are affected by insufficient food; insufficient food during pregnancy, besides rendering the young at the time of birth small and weakly, has also the injurious effect of curtailing the provision necessary for its future