

and making of roads upon scientific principles; the proper management of grass ground; the selection and management of live stock; the brewing of beer; the dairy; and some other important branches of farm management.

#### CHOICE OF MEAT, POULTRY, AND FISH.

**Beef.**—The grain of ox-beef when good, is loose, the meat red, and the fat inclining to yellow. Cow beef, on the contrary, has a closer grain, a whiter fat, but meat scarcely as red as that of ox beef. Inferior beef, which is meat obtained from ill-fed animals, or from those which had become too old for food, may be known by a hard skinny fat, a dark red lean, and in old animals a line of a horny texture running through the ribs. When meat pressed by the finger, rises up quickly, it may be considered as that of an animal which was in its prime; when the dent made by the pressure returns slowly, or remains visible, the animal had probably passed its prime, and the meat consequently must be of inferior quality.

**Veal** should be delicately white, though it is often juicy and well flavoured when rather dark in colour. Butchers it is said, bleed calves purposely before killing them, to make the flesh white; but this also makes it dry, and flavourless. On examining the loin, if the fat enveloping the kidney be white and firm looking, the meat will probably be firm and recently killed. Veal will not keep as long as an older meat, especially in hot or damp weather; when young, the fat becomes soft and moist, the meat flabby and spotted, and somewhat porous like sponge. Large overgrown veal is inferior to small delicate, yet fat veal. The fillet of a cow is known by the udder attached to it, and by the softness of its skin; it is preferable to the veal of a bull calf.

**Mutton.**—The meat should be firm and close in grain, and red in colour, the fat white and firm. Mutton is in its prime when it is about five years old, though it is often killed much younger; if too young, the flesh feels tender when pinched; if too old, on being pinched it wrinkles up, and so remains. In young mutton the fat readily separates; in old it is held together by strings of kins.

In sheep diseased of the rot, the flesh is very pale coloured, the fat inclining to yellow, the meat appears loose from the bone, and if squeezed, drops of water ooze out from the grains; after cooking the meat drops clean from the bones.

Wether mutton is preferred to that of the ewe; it may be known by the lump of fat, on the inside of the thigh.

**Lamb.**—This meat will not keep long after it is killed. The large vein in the neck is bluish in colour when the fore quarter is fresh, green when becoming stale. In the hind-quarter if not recently killed, the fat of the kidney will have a slight smell, and the knuckle will have lost its firmness.

**Pork.**—When good the rind is thin, smooth, and cool to the touch; when changing from being too long killed, it becomes flaccid and clammy. Enlarged glands, called kernels, in the fat, are marks of an ill fed or diseased pig.

**Bacon** should have a thin rind, and the fat should be firm, and tinged red by the curing; the flesh should be of a clear red, without intermixture of yellow, and it should firmly adhere to the bone. To judge of the state of a ham, plunge a knife into it to the bone; on drawing it back, if particles of meat adhere to it, or if the smell is disagreeable, the curing has not been effectual, and the ham is not good; it should in such a state be immediately cooked. In buying a ham, a short thick one is to be preferred to one long and thin. Of English hams, yorkshire, Westmoreland, and Hampshire are most esteemed. Of foreign, the Westphalia.

**Venison.**—When good the fat is clear, bright, and of considerable thickness. To know when it is necessary to cook it, a knife must be plunged into the haunch; and from the smell the cook must determine on dressing or keeping it.

In choosing poultry, the age of the birds is the chief point to be attended to.

An old turkey has tough and reddish legs; a young one smooth and black. Fresh killed, the eyes are full and clear, and the feet moist. When it has been too long kept the parts about the vent begin to wear a greenish discoloured appearance.

**Common domestic fowls**—when young have the legs and combs smooth; when old, they are rough, and on the breast long hairs are found instead of feathers. Fowls and chickens should be plump on the breast, fat on the back, and white-legged.

**Geese.**—The bills and feet are red when old, yellow when young. Fresh killed, the feet are pliable, stiff when too long kept. Geese are called green, when they are only two or three months old.

**Ducks.**—Choose them with supple feet, and hard plump breast; tame ducks have yellow feet, wild ones red.

**Pigeons** are very indifferent food when they are too long kept. Suppleness of the feet shows them to be young; the state of the flesh is flaccid when they are getting bad from keeping. Tame pigeons are larger than the wild.

**Hares and rabbits**, when old, have the haunches thick, the ears dry and tough, and the claws blunt and rugged. A young hare has claws smooth and sharp, ears that easily tear, and a narrow cleft in the lip. A leveret is distinguished from a hare by a knob or small bone near the foot.

**Partridges**, when young have yellow legs, and dark coloured bills. Old partridges are very indifferent eating.

**Woodcocks, and snipes**, when old, have the feet thick and hard; when these are soft and tender, they are both young and fresh killed. When their bills become moist, and their throats muddy, they have been too long killed.

#### BURNT CLAY AS A MANURE.

TO THE EDITOR OF THE LINCOLNSHIRE CHRONICLE.

SIR,—Having observed in your paper of the 17th ult. an interesting extract on "Burnt clay as a manure for heavy clay land" (originally communicated by Mr. Pusey, M.P.), perhaps it may not be altogether uninteresting to some of your readers to know that burnt clay laid on land acts both mechanically and chemically; mechanically, by rendering the soil porous and permeable to the air; chemically, by its property of fixing ammonia in the soil (similar to the action of sulphate of lime (gypsum) and chloride of calcium), which would otherwise be lost from its vitality. As nitrogen is indispensable for the nutrition of all plants, it is the object of the agriculturist not only to provide it in sufficient quantity, but to present it in a condition in which it can be taken up by their roots. This is attained in manuring with burned clay; the *modus operandi* of which as a manure was very unsatisfactorily explained until Liebig threw light upon the subject, by demonstrating the presence of ammonia in the atmosphere and in rain water, and pointing out that the fertility of ferruginous soils and land manured with burnt clay was owing to "the oxides of iron and alumina being distinguished above all other metallic oxides by their power of forming solid compound with ammonia." After stating that "minerals containing alumina, or oxide of iron, possess in an eminent degree the remarkable property of attracting ammonia from the atmosphere and of retaining it," he goes on to say that "soils, which contain oxides of iron and burnt clay must absorb ammonia—an action which is favoured by their porous condition; they further prevent the escape of the ammonia, once absorbed, by their chemical properties; the ammonia absorbed by the clay or ferruginous oxides being separated by every shower of rain and conveyed in solution to the soil." Although in Mr. Pusey's experiment the 3rd lot (manured with