

## Wasting Atrophy in Animals

Most of us are more or less familiar with the sight of wasted men and animals. The effects of tuberculosis and some other wasting diseases are so well seen among cattle that in certain districts they are known as "wasters," and a very good name for them it is. They are wasted themselves and continue to cause waste as long as anyone with more hope than experience will buy them. For such, a bullet is the best prescription, but there are numerous causes of wasting besides tuberculosis, some being remedial and others not.

Besides general atrophy, there are many cases of wasting of certain muscles, as those of the shoulder and hind-quarter.

Sometimes the cause is palpable and obvious, as when an injury to the lower portion of the limb restrains the animal from using it. Chronic lameness—as navicular—will result in wasted shoulder, and the amateur, thinking that the trouble is at the top instead of at the bottom of the limb, points to the wasted muscles each side of the blade bone as proof of his diagnosis being correct. Disuse of any muscle or any organ has a tendency to result in atrophy, the excercise of brain and body being alike

or infestation by fluke, which block the liver and interfere with digestion, and so induce atrophy, beginning or, shall we say, first observed, in the muscles of the loins. The man who can distinguish between the thinness of poverty and the wasting of disease can easily make money out of his knowledge. I have known some who thought they could do so, because they were successful once or twice, and then they have backed their opinion with money, and gone on buying "wasters" until pretty nearly ruined.

Questions often appear in the veterinary columns of farm papers asking for a remedy for beasts not thriving, but without any history or guide to a diagnosis. It is important in all cases of wasting to look for a cause. It may be that one bullock in a bunch has worse powers of assimilation than others, or he may be robbed of his nutriment by worms after the chief labor of digestion has been performed. An inactive liver may fail to supply the bile in the intestines, which at once acts as an antiseptic, preventing decomposition of the injesta, and stimulating that peculiar worm-like motion which steadily carries along the contents of the intestines; then a liver stimulant may work won-

gest atrophy due to disease. In no species of farm animal is the transmutation of fat into milk more marked and rapid than in the sow. The fat sow at farrowing will be lean by the time her pigs are weaned. Every available deposit of fat has been utilized; that stored under the loin, behind the eyes, and even in the hollows of the round bones. The first process of conversion after parturition begins in the womb itself. During pregnancy it attains large dimensions and considerable thickness; as soon as its function of carrying ceases it begins to undergo a natural fatty degeneration and is transmitted into milk, the change continuing until the womb is so wasted as to be very little bigger than in the unimpregnated gilt.

It is for the practical farmer to decide how "fresh" he will have his cows, and how much flesh he will allow a sow to carry while pregnant, but, others being equal, we know which will fare best as to milking and condition afterwards; which will waste like butter in the sun, and which will recover soonest when the demand ceases.

### TREATMENT OF WASTING

As a broad, general rule, we shall be pretty safe in giving a preliminary dose of worm medicine, and an aperient salt-



A four-in-hand of heavy draughts. Owned by The Dominion Transport Co., Toronto.

necessary to maintain their respective functions and utility. A frequent form of local wasting is that incurred by colts, and even by mature horses straining the muscles on each side of the blade bone when at the plow; one foot on the ridge, the other in the furrow. This is thought to be a nerve injury, although never clearly demonstrated to be such. The wasting may be noted in a few days, while months will be passed in recovery. This shoulder wasting does ultimately recover in nearly all cases.

Pain in a fore limb that does not limit the sphere of movement does not, as a rule, cause wasting; but any pain in a hind limb is nearly sure to make a horse or a beast "kick up," as it is called, and this wasting of the belly is soon followed by loss in the bulk and tone of the loin and quarter muscles. This may be taken as evidence that some forms of wasting are of nervous origin and are not caused by disease.

### SHEEP ROT

A too familiar example among sheep farmers is the wasting caused by "rot,"

and the beast begins to put on flesh. In the horse stable (seldom with horses at grass) we see rapid wasting accompanied by what is called—but it is not—diabetes. This polyuria is generally cured by a half dose of physic and a few drachm doses of iodine in a ball with vegetable tonics.

### WASTING OF COWS

There is a wasting of cows which cannot be regarded as actual disease, but as a physiological process, the fat between the muscular tissue being taken up by the lymphatics and converted into milk. The object of the farmer is, of course, the conversion of plants into milk or flesh in the keeping of cattle, but nature sets a limit on his operations, and that limit is sometimes reached sooner in one cow than in the average of the herd. The act of milking, and the kind of food, besides the hereditary disposition (by selection) tend to the over-production of milk, even at the expense of a fair reserve of fat between the muscles, and some cows can be pumped off milk until their wasted frames sug-

ed to the species; and then follow it up with mineral and vegetable tonics, such as iron, copper, quinine, gentian, ginger, caraway and other aromatics. Local wasting should be treated by blistering, liniments, massage, and in most cases a degree of compulsory exercise, but this applies more to front limbs than hind ones. The exercise necessary to graze is not too much for an animal with a wasted shoulder.

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### Mature Beef Animals Earlier

To begin right we require to have good grades of any of the beef breeds, for an animal of no breeding and poor form rarely if ever makes a profitable feeding steer. Therefore we must have an animal that possesses some merit. Aim to raise calves of good beef form, of the low-down, short-legged, blocky type, having broad backs, striving to produce animals that will possess lots of quality, with mellow-handling skin, indicating strong feeding powers.

In the future more of the finished