

from small particles of bedding and dust and dirt, that washes into them.

Everything considered, draining the urine and liquid manure to the outside of the stable to a suitable catch-basin will give the best results, and save a great deal of expense in getting at the one in the stable when it clogs up, and will, in the end, prove much more satisfactory.

THE LITTER CARRIER.—During the past few years the price of farm labor has made some wonderful increases; it is also difficult to keep farm labor, due many times to the lack of labor-saving devices. There was a time when the farm laborer expected to perform most of his work by "main strength and awkwardness," as the old saying goes, but they have not been slow to note the improved labor-saving devices, consequently they are more easily secured and kept where the farmer has an up-to-date equipment.

The litter carrier can be installed in practically any stable, and it is an exceedingly convenient means of handling the manure and litter from the stable. It will save enough in labor in the course of a few months to pay for it.

NOTE.—To offset some of the disadvantages of a concrete floor in the stall, a false floor is frequently laid on top. Two-inch lumber spaced between $\frac{1}{2}$ inch and $\frac{3}{4}$ of an inch, to permit of drainage and cleaning, is in general use. This provides the advantages of a concrete floor and eliminates the disadvantages. Elm, beech and maple are used for such a floor.—Editor.

LIVE STOCK.

Crop prospects are good, this should help the stockman this coming winter.

Beware of sheep and cattle bloating when first turning on rape or second growth clover.

High-priced feed won't turn a scrub into a profit-making individual, but it may help his appearance.

The lambs for market should be on fresh pasture, and a little grain will aid in fitting them for the block.

Did you ever try cutting green corn for the pigs confined to the pen? They are apparently very fond of this kind of green feed.

Have you secured your flock header? The first usually get the pick of the flock, and you should not be content with any second rate sire in your flock.

We have failed to locate a man who admits that he can afford to use a scrub bull, yet many continue to use one when all evidence is against it being a profitable herd header.

A Huron county farmer who finds it difficult to get suitable labor to work his 400-acre farm is contemplating selling one hundred acres and devoting more time to the raising of better live stock.

Market receipts show a marked fluctuation from time to time. If we are to build up an export trade it is important that there be a fairly steady supply going to market from month to month.

Judicious in-breeding may intensify some good characteristic in the progeny, but one must know his stock before attempting in-breeding and even then must be careful not to carry it too far.

Prof. Sackville advises plenty of green feed and exercise in the paddock for young pigs on the sow. Lack of these two essentials to thriftiness account for many a failure in raising winter litters.

Those few feet of silage left in the silo when the herd went on grass comes in very handy now. If a little silage for summer feeding is profitable would not a full silo to supplement the pastures over a longer season be a bonanza to the stockman.

On July 23 the Western Canada Shorthorn Sales Association sold 83 head of Shorthorns by auction at an average of \$354 on females, and \$485 on males. The highest-priced female was Roan Lady 58th, selling for \$1,150 to an American breeder.

When weaning the lambs some attention should be given to the ewes' udder. If still milking freely she should not be turned on fresh pasture for a few days, and the milk should be drawn. Do not have lambs and ewes in adjoining fields. Separate them as widely as possible.

Aberdeen-Angus breeders held a successful sale at Brandon the last week of July when 62 females sold for a total of \$31,250. Blackbird of Glencarnock 3rd., the female champion at Saskatoon and Brandon topped the sale of \$3,000 going to the bid of C. H. Richardson of Alberta.

It is too late to make entries for the Canadian National Exhibition, Toronto, August 28 to Sept. 11, but there is yet time for the Western at London, September 11 to 18. The Western Fair are issuing a catalogue of live stock this year. Help the management by making entries early.

Hon. Duncan Marshall who with J. A. Watt and T. A. Russell has been purchasing stock in

Britain has, we understand, secured a number of prize-winning Shorthorns and Southdowns at the Royal Show, among which are reserve champions. In all about 100 Shorthorns of top-notch breeding are in the importation.

J. D. Brien of Ridgetown, writes that a Cotswold lamb born in April, 1919, weighed 198 pounds on May 1, 1920, and the fleece weighed 24 $\frac{3}{4}$ pounds. Mr. Brien states, "I never yet in my experience saw a lamb with such a remarkable fleece; not one ounce of bad wool. If we had shorn close on legs, breast and head, I am sure the fleece would have weighed 25 pounds."

This is the time of year when the eggs of the gad-fly are being laid. Prevention of the trouble is more practicable than effecting a cure. Smearing the noses of the sheep with tar is a preventive recommended. It is not an enviable task treating each member of the flock individually, an easier method is to apply tar to the edge of the salt trough and the material will adhere to the nose while the animal is getting its salt allowance.

The Summer Consignment Sale of the Ontario Duroc Jersey Breeders Association held in Essex, on Saturday, July 31, came in a very busy time for the farmers of the county as harvesting and threshing were



Two-shear Southdown.
Reserve champion at the Royal.

very general. Ideal weather prevailed and the crowd who attended the sale was rather small. The offering of Durocs was a credit to the breed and highly commented upon by Duroc Jersey breeders from the United States. Thirty-five sows brought an average of \$95 each. Service boars sold as high as \$110, while spring boars brought from \$25 to \$50 each. Purchasers were distributed over Southwestern Ontario and one young boar was sold to Michigan.

New Piggery on the O. A. C. Farm.

For a number of years the Animal Husbandry Department of the O. A. C. has been raising hogs and carrying on pig feeding experiments and breeding work in buildings which were wholly inadequate and not in keeping with the importance of the work being done. A new building is now nearing completion and the herd will soon be transferred from its old quarters to the new location, which is on the highest elevation of the experimental grounds. This piggery is built for service, and, while it may not be as fancy as some piggeries, it is a building designed for convenience in feeding and caring for swine and also to promote healthfulness and thrift in the herd. The building is 32 feet wide and 130 feet long, with an 8-foot ceiling. The foundation is of concrete, extending 15 inches above the floor. The remainder of the wall is three ply of lumber and one of paper, with the width of the studding for air space. The ceiling is of 2 by 6-inch material, with the boards placed two inches apart. There is ample room in the loft for a large supply of straw. The slatted ceiling is a means of ventilation. There is a window 4 feet deep and 3 feet wide in each pen. They are hinged at the bottom, opening in at the top so as to admit fresh air without causing a draft on the pigs. Having the straw in the loft will tend to absorb moisture and make a much more healthful pen than if there was no straw over the

pigs. The pens are 11 feet wide and 12 feet deep, with a door leading out of each to a paddock which is the width of the pen and 24 feet deep. The doors to the paddock may be raised or lowered by means of rope and pulley operated from the feed passage. Steel fronts are used throughout with gates leading from each pen to the passageway. The floor, troughs and partitions are of concrete. In a corner of each pen is a sleeping pen surrounded by a concrete ledge but covered with boards. These boards may be lifted out for cleaning if dirt accumulates underneath them. It is generally recognized that boards are preferable to concrete for hogs to sleep on.

Fourteen pens of the size mentioned are for growing pigs, and there is a tight partition separating these from the remainder of the piggery, as it is not considered advisable to have young pigs in the same quarters as growing and fattening pigs. There are two pens, each 8 by 12 feet, fitted up as farrowing pens. They are across the feed alley from the boiler room, and as there is a tight partition on either side these pens will be at moderate temperature even in zero weather. Beyond the farrowing pens are eight pens for sows and their growing litters. The accompanying illustration gives a view of the piggery and the paddocks adjoining. There is also a small acreage of land to be devoted to hog runs and pasture. An open shed will be noticed at the one end. This is 16 feet wide and 36 feet long, 5 feet high at the back and 8 feet high in the front. There will be a row of windows at the top of the front, leaving between four or five feet open. This shed is for wintering the breeding sows. It should be quite comfortable in the shed, and it affords a place for the sow or young pigs to take exercise in mid-winter.

In the loft over the piggery are bins which will hold several tons of feed. A track is put in so that the loft may be filled with straw by the use of slings. These conveniences will undoubtedly save a good deal of time and hard labor. A feed and litter carrier is installed in the piggery. Judging from the appearance and layout, this building should give splendid results.

Actinomycosis or Lump Jaw.

Actinomycosis, commonly called lumpjaw, is a disease due to a specific fungus and characterized by the appearance of enlargements of connective tissue, growth of bone, or abscesses, which usually appear about the head of the animal affected. The disease is not contagious in a general sense, but should an animal consume the pus escaping from an abscess on a diseased animal, it is possible the disease might be contracted. While the disease is most common among cattle, it is occasionally seen in swine, and very rarely in horses. Cattle which have access to straw stacks, especially of barley or bearded wheat, are probably the most subject to the disease from the fact that the beards are liable to scarify or puncture the tissues of the mouth, hence render the virus easy access. Stable-fed cattle are often infected by feed fed in a dry stable, but which was grown on low lands, especially that subject to over-flow of water. The cause of the infection is a thread-like fungus known as the *Streptothrix actinomyces*, or the *actinomyces bovis*, commonly called the ray fungus. This fungus grows on various grasses, particularly on the awns of barley and related plants, especially when these have grown on low lying land. Infection usually takes place through abrasions on the mucous membrane of the mouth, or through wounds in the skin.

Symptoms.—In cattle the disease appears in different forms, as, enlargements about the head or throat; an affection of the tongue; disease of the lips or growth in the mouth, pharynx or larynx. The enlargement may appear on any part of the head, some part of the lower jaw being the usual seat. If the bone be not involved the lump is more or less movable by manipulation, while, if the bone is involved, of course it is immovable. The growth is usually gradual, sometimes quite slow and an eruption and discharge of mucopurulent pus may occur, the wound heal and in a variable time the eruption recur, etc. In other cases no eruption takes place. The general health of the animal does not appear to be interfered with for considerable time. In cases where the bone is involved, the teeth sockets in most cases become involved, the teeth become loose or drop out, the animal, as a consequence, is unable to masticate properly, and fails more or less rapidly in flesh. When the tongue is involved, a condition known as "wooden tongue," it becomes enlarged and hardened, and the animal has not the normal use of it; there is



New Piggery at O. A. C., Guelph, Ont.