

bigger than a rat trap under his arm, to show to the Highland Agricultural Society authorities; and how he laboured at it secretly in an out-house, till the advent of that happy moonlight night when he and his brother got the horse out of the stable, harnessed it to the machine, and laid the corn-stalks low at last. This was in 1826-27; and the machine, which is still preserved as a trophy, was worked continuously up to last year. Mr. Bell had laboured, and other men, Americans more especially, had entered into his labours, and yet while thousands of pounds were saved annually by his machine, even Scotland had given no public recognition to her benefactor. Mr. Scott Skirving, of Camptoun, near Drem, introduced the subject to the East Lothian Agricultural Club on Oct. 5, 1866, and in the following January at the meeting of the Highland and Agricultural Society. Both acknowledged the justice of a claim which had been too long overlooked, and the society not only subscribed £100, but gave valuable official aid in the collection of subscriptions, which was equivalent to nearly £100 more. The clear sum collected still falls short of £1,000 by about £120, and it is to be hoped that English agriculturists, who owe as much as their Scottish friends to Dr. Bell's invention, will not hold back as they have hitherto done. Mr. Skirving was met with plenty of counter claims both in England, America, and Scotland; but the makers all seemed to be in the most blissful ignorance of the fact that there were claims long antecedent to theirs. One and all, with the exception of the American, had sunk into oblivion, because they were utter failures. The earliest of the American were copies from Mr. Bell's, a picture of whose machine had been given in the *Quarterly Journal of Agriculture* (1828), of which several copies were found to have crossed the Atlantic. Pliny and other Roman writers on agriculture mention some machine of the kind, which tore off the heads of corn and left the straw as valueless. In 1785-6 Arthur Young takes up the tale, and describes a machine of the same kind, and so do Mr. Capel Lofft, and Mr. William Pitt in his "Survey." In 1799 one Boyce took out a patent; in 1800, Richard Mear; in 1803, Hawkins, of New Jersey, U. S.; and in 1805, Plunket, of Deptford, all produced machines; and in 1806, Mr. Gladstone, of Kircudbrightshire, got a premium for one from the Highland and Agricultural Society. Mr. Kerr, of Edinburgh, received several small grants from the same source; and Mr. Scott, of Ormiston, East Lothian; Mr. Joseph Mann, of Cumberland, and Mr. Ogle, of Alnwick, all tried their hands in 1815, 1820, and 1822, respectively. Their fame was, however, so fleeting that Mr. Bell had never even heard of any machine of the sort, except that made, amid his other countless activities, by the late Mr. Smith, of Deanston. In consideration of his invention, the Senate of the University of St. Andrews recently conferred on Mr. Bell the degree of Doctor of Laws. —*Exchange.*

Fourth Annual Sheep and Shearing Exhibition.

We have received from Mr. J. T. Nottle the following Prize-List, intended for the Fourth Annual Sheep and Shearing Exhibition, to be held in the City of Hamilton on the 25th May, the day appointed for the celebration of the Queen's Birthday:

PRIZE-LIST FOR SHEEP AND SHEARERS.

(Open to the World.)

CLASS I.

Best Aged Leicester Ram.....	\$8 00
Second do do	4 00
Third do do	2 00
Best Yearling do	8 00
Second do do	4 00
Third do do	2 00—\$28 00

CLASS II.

Same prizes for Cotswolds as in Class 1.....	28 00
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CLASS III.

Same prizes for Lincolns as in Class 1....	28 00
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CLASS IV.

Same prizes for Southdowns as in Class 1....	28 00
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CLASS V.

Best Merino Ram of any age.....	8 00
Second do do	4 00
Third do do	2 00

CLASS VI.

Sweepstakes open to all other Classes.

N. B.—An Entry Fee of \$1 on each Sheep to be paid in this Class only.

Best Ram of any age or breed.....	16 00
Second do do	12 00
Third do do	8 00
Fourth do do	4 00

PRIZE FOR FLEECES.

Best Fleece according to value.....	\$8 00
Second do do	5 00
Third do do	3 00
Fourth do do	1 00

N. B.—Sheep and fleeces to be unwashed, and the sheep to be sheared on the ground.

PRIZES FOR SHEARING.

Best Shearer on sheep of any age.....	20 00
Yearling Sheep.	Aged Sheep.
Second best shearer on.....	8 00 8 00
Third do	5 00 5 00
Fourth do	3 00 3 00
Fifth do	2 00 2 00
To the Shearer who binds the neatest fleece.....	1 00

N. B.—Sheep to be unwashed. An entry fee of 50 cents to be paid by all shearers competing for the first prize of \$20.

H. J. LAWRY, President.
J. T. NOTTLE, Secretary.

New Material for Paper.

THE high cost of rags for the manufacture of paper has led to long-continued and costly attempts to substitute other articles, such as wood, straw, bamboo, cornstalk, husks, etc.; but, owing to the great expense for chemicals, and the machinery necessary for converting the materials into pulp, the cost of paper has not, to any considerable extent, been reduced. It is now alleged that the okra plant, which grows luxuriantly in all parts of the United States, possesses all the requisites for making every description of paper, from the common wrapping to the finest book or bank-note paper, either sized or non-sized, without the addition of any other material whatever. It is claimed that this has been practically demonstrated, and that the discoverer has, within the past few months, manufactured by the most simple and economical process, in different mills, a variety of samples of papers which, although made under very unfavourable circumstances, possess all the characteristics of paper made from linen rags and manilla rope. If this should turn out to be true, it cannot fail very greatly to affect the price of paper, as the okra can be raised cheaply and abundantly.—*N. Y. Ind.*

Veterinary Department.

Thread-Worms in the Air Passages of Lambs

THE North British *Agriculturist* has the following short notice of this affection:—"Young sheep are described as coughing vehemently, falling off in condition, in some instances suffering also from diarrhoea, and unfortunately dying in considerable numbers. An Oxfordshire correspondent states that his loss from this cause has nearly reached one hundred out of a flock of about five hundred. Enquiries as to remedies are, we perceive, made in the *Mark Lane Express* and various other journals. Many articles are used as palliatives, various patent nostrums are highly spoken of, but nothing that we have seen used proves so effectual as the mixture of oil of turpentine, linseed oil, and lime water. For sheep, now ten or eleven months old, a teaspoonful of the turpentine, and one ounce each of the other two ingredients will suffice. The dose given in the usual way, from a bottle by the mouth, should be repeated on two or three consecutive mornings. If after a few days' respite any of the sheep still cough, another dose or two should be administered. Inhalation of chloroform or of sulphur fumes has been tried, and found very serviceable, but for ordinary cases where many sheep are affected these remedies are not so convenient as the more familiar turpentine drench.

RINGBONE.—A subscriber asks "Whether Biniodine Ointment, or Iodine, is a sure remedy for Ringbone on horses? We have tried the blistering ointment according to the direction of a veterinary surgeon without effect. Is a cure ever effected by cutting out the ringbone, as it is called?" Biniodide of mercury, made into an ointment with lard, is one of the best applications that can be used for Ringbone or other bony enlargements. Ringbone, however, is a disease that often proves very difficult to treat. Cutting out the ringbone, as it is termed, is a barbarous operation, and very often renders the horse totally useless.

The Apiary.

Hiving Bees.

WHEN bees are allowed to swarm naturally, everything should be in readiness before the swarming season arrives, so that when swarms come off there may be no confusion or difficulty in hiving. Hives should be kept cool, and if old, they should be well cleaned. If a swarm is seen issuing from a hive, do not get in a "flurry," but keep cool. Do not be so foolish as to blow horns, ring bells, and scare your bees to the woods; but stand quietly and watch their movements, and nineteen times out of twenty they will cluster all right. As soon as they have settled, prepare to hive them, an operation which may be successfully done, and without the least difficulty, as follows:—

First.—Bring a dish of cold water, and with the hand or a whisk of grass sprinkle the cluster well. This will make them perfectly quiet and easy to handle. Bring out a table, or if that is not convenient, spread a cloth or boards upon the ground, and if they are to be hived into a common box or straw hive, set it upon the table or place prepared for it, raise up one side an inch or more, and put under a stone or chip to hold it. Then shake your bees into a pan, basket, pail, or any dish that will hold them, and turn them down near the hive, and they will at once commence to enter. If it is desirable to have them enter faster than they are naturally inclined to do, take a wing and gently wing them in. As soon as all or nearly all are in, the hive should be carried to its stand, and well shaded if the sun is shining. New hives or newly painted hives should be shaded for several days, as bees cannot stay in an over-heated hive. If the bees cluster upon a limb, from which it would be difficult to shake them, the limb may be cut off with a saw and laid near the hive; the bees will soon leave and enter. Sometimes bees will cluster upon the body of a tree, when it is more difficult to get them off without irritating them. They should be well sprinkled, and very carefully brushed off with a wing or quill feather into a dish, and carried to the hive as before stated. An inexperienced person or novice, should in this case wear a bee-protector. It will give them courage, and they will move more carefully.

This plan of hiving will be found much better than the old method of shaking the bees into a hive, and then turning it over upon a table or board. I have known the queen to be killed by turning over the hive, and more or less bees are always killed in the operation. If moveable comb hives are used, they should be so constructed that the bottom board may be dropped at the rear of the hive for the purpose of putting in the bees when hiving. Swarms should never be allowed to stand where they are hived until evening, as is the practice with some, but should be moved at once to their stands, as some of the bees will go into the field to work in ten minutes after they are hived; and if left until evening large numbers will have commenced to work, and having marked the spot will return there the next day, and not finding the hive, will wander about, and many will be lost. Second swarms are generally far more irritable than first or top swarms; hence, these are far more likely to sting; but cold water will soon quiet them, and they may then be hived with safety.

A Bee Flower.

AN excellent bee plant is the *Phacelia tanacetifolia*, or Tansy-leaved Phacelia. It is a tolerably hardy annual, some seeds of which were brought into this country from California in the year 1832. Although but little cultivated, it is remarkable for its elegant foliage and fasciated spikes of violet flowers, which continue to blow during the greater part of the summer and autumn months, but chiefly in June, July, and August.

This plant is easily raised from seed, which should be sown in the spring in ordinary garden ground, and it requires no protection after the severe frosts are over. Besides being a great acquisition to apiarians and to amateur bee-keepers on account of the special attraction of its numerous flowers for bees, it is highly ornamental, and deserves to be generally grown in flower gardens, and in the neighbourhood of apiaries.—*Cor. Cottage Gardener.*