#### BOOK REVIEW.

Any book reviewed in this department may be ordered through this office, at the price stated.

PHYSICS OF AGRICULTURE. - A work which should be consulted by farmers has recently come to the editorial table. It is a text-book of the Physics of Agriculture. This up-to-date work is written by F. H. King, late Professor of Agricultural Physics in the Wisconsin Agricultural College and Experiment Station, and now head of the Department of Agricultural Physics at Washington, D. C. As the author aptly puts it, "the great need of agricultural practices at the present time is a keener appreciation and a more thorough comprehension of the principles which under-. . . the laws and prinlie them. ciples which control his practice each farmer must know before he can secure his results with the greatest certainty and at the least cost." This work is easily understandable by the farmer, and has been used in the short course in agriculture at Madison. We briefly call attention to some of the chalpters in the book which are of special interest to farmers. The maintenance of country roads; farm motors, gasoline and steam engines and windmills; farm machinery and the construction of silos; under-draining, etc., are all subjects of vital and daily interest to the farmer. Professor King has succeeded in making his book both interesting and practical. The problems of soil moisture as related to cultivation are well handled. The explanations regarding the principles of the draft of horses are clear and easily understood. It is hardly necessary to say more of the book, except to strongly advise its addition to every farmer's library. At the present time we are unaware of any work on the same subject in the English language which at all covers the ground and is as useful to the agricultural student as is this book. The price, \$1.75, places it within the reach of all. It is well illustrated, and is bublished by the author at Madison, Wis. It can be supplied from this office at the price mentioned above.

# NOTICES.

THE WINDMILL ON SHIPBOARD.—
A circular from the Ontario Wind Engine and Pump Company, Toronto, shows an engraving of a 16-foot Canadian Airmotor furnished for the South Pole exploration steamer, "Discovery," which left England some time ago for the Antarctic Ocean. By driving an electric dynamo it Junishes light for the whole ship, thus saving fuel and labor, and cheering the ship's company during the long south polar night.

THE FARM TELEPHONE.—The farm telephone enables the farmer to transact business, give orders, get market quotations on his products, keep thoroughly informed, etc., without going to town. In the busy season he is enabled to save valuable time. This is aptly illustrated on another page of this issue. to save valuable time. This is aptly il lustrated on another page of this issue where the farmer is shown ordering up to-date new McCormick binders and twine from the dealer.

# REMOVED BOG SPAVIN.

The Lawrence - Williams Co., Cleveland O.:
In the fall of 1896 we had a valuable brood mare which became very lame with bog spavin, and during the winter we commenced using "Caustic Balsam" on it, putting it on once a week, and spending at least a half hour in rubbing each time. To-day her leg is as smooth as before, and we now consider Caustic Balsam the one indispensable medicine for the stable.

H. A. MIXER & CO.

# GOSSIP.

Mr. John McFarlane, Dutton, Ont., whose advertisement of Shorthorn cattle and Oxford Down sheep has been runing in our columns, writes us in ordering a change of advertisement, that he has sold his flock of Oxfords, 51 in number, to Henry Arkell, of Arkell, Ont. Mr. McFarlane is now offering for sale Shorthorn cows, heifers in calf, a bull calf 11 months old, and, heifer culves of Bates and Cruickshank strains.

O'Neil Bros., Southgate, Ont., breeders of Hereford cattle, in ordering change, write: "We have to report the sale of two very fine young bulls recently, both by Imp. Sunny Slope Tom 1st 86'085. One, Rex of Sunny Side, went to Mr. W. Bennett, Chatham, Ont.; the other to a herd at Wingham, Ont. Our herds are doing well, and the baby Herefords are occasionally putting in an appearance. The two Berkshire boars we offer are an exceptionally fine pair, are sure and good stock getters, and their breeding is of the best, coming from the Ontario Agricultural College, Guelph, and being of the proper bacon type.

ELECTRIC **Handy Farm Wagons** 

easier for both the man and t wide they do not cut into the gro the labor of loading is required many times, occasion of the short lift. They are equipped with our famous Electric Steel Wheels, eitherstraighter stagger spokes. Wheels any height from 24 to 60 inches. White hickory axies, steel hounds. Guaranteed to carry 4000 lbs. Why not get started right by putting in one of these wagons. We make our steel wheels to fit any wagon. Write for the catalog. It is free. ELECTRIC WHEEL CO., BOX 253. QUINCY, ILL.

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Guernseys: OUT OF

Roseland III. (Imp.). Princess May (Imp.).

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# AYRSHIRE CATTLE AND POULTRY.

FOR SALE: Royal Star of Ste, Annes, 1st-prize bull at Toronto and London, also heifer calves, heifers and cows from dams with milk records from 40 to 64 lbs. per day. Price from \$35 to \$80 each. Barred Plymouth Rocks, Black Minorcas, Cornish Indian Plymoun.
Games, \$1.50 each. Four per pair. For particulars write
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STEWART'S MACHINE Highest and Only Award at Pan-American Exposition. 1902 Model, price including grinder, only grinder, only

Will be fitted with the wonderful Stewart Shear wonderful Stewart Shear cowner of 10 Sheep or more can afford to shear by hand seen though the work be done for nothing. Don't butcher your sheep. Shear with this machine, and get ONE POUND WOOL EXTRA PER HEAD. Will more than cover the whole cost of shearing.
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Booth and Bates Shorthorns, topped with Cruickshank bulls. Young cows, bulls and heifers always on hand for sale. Eligible for the American herdbook. Royal and Highland prizewinners included for the last two years. Close on £400 won in prizes lest year and this for the last two years.
last year and this.

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Ayrshire HERD of 150 cows and heifers, bred from deep milkers, with large teats, of a commercial stamp. Established over half a century. J. & A. Wilson, Boghall Farm, Houston, Renfrewshire, Scotland.

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Renfrewshire, Scotland.

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# J. E. CASSWELL'S

Laughton, Folkingham, Lincolnshire, England. LINCOLNS.

Breeder of Lincoln Long-wooled sheep. Flock No. 46. At the Palermo Show, 1900, 25 rams bred by J. E. Casswell averaged £54 each; 14 of the best averaged £63 each, this being the highest sale of the season in the Argentine. Ram and ewe hoggs and shearlings for sale; also Shire horses, Shorthorns, and fowls. Telegrams: "Casswell, Folkingham. Eng." Station: Eillingboro, G N R. horns, and fowls. Telegrams: "Casswell, Folham, Eng." Station: Billingboro, G. N. R.

Dominion Swine Breeders' An-

nual Meeting.

The annual meeting of the Dominion Swine Breeders' Association was held at the Palmer House, Toronto, January 24th, the President, Mr. Wm. Jones, in the chair. The Secretary-Treasurer's report showed the affairs of the Association to be in a prosperous condition. The financial statement showed receipts, \$5,641.14; expenditures, \$3,525.42, and a balance on hand of \$2,115.72. The chief effort during the present year will be in reference to the export trade. A committee was appointed to prepare a

be in reference to the export trade. A committee was appointed to prepare a model prize list for the leading as well as the local fairs in so far as practicable. The meeting reported favorably on giving a grant to exhibitions in Western Canada.

The following officers for the current year were elected: President, G. B. Hood, Guelph; Vice-President, Thos. Teasdale, Concord; Secretary-Treasurer, A. P. Westervelt. Directors for the different sections: Berkshires, Geo. Green, Fairview; Yorkshires, J. E. Brethour, Burford; Chester Whites, R. H. Harding, Thorndale; Poland-Chinas, W. M. Smith, Fairfield Plains; Duroc-Jerseys, L. B. Tape, Ridgetown; Tamworths, J. C. Smith, Hintonburg; and for Essex, Jos. Featherston, Streetsville; Ontario Agricultural College, G. E. Day, Guelph. General Director, Wm. Jones, Mount Elgin; Auditor, J. M. Duff, Guelph. Representatives to Fair Boards: To-Agricultural College, G. E. Day, Guelph. General Director, Wm. Jones, Mount Elgin; Auditor, J. M. Duff, Guelph. Representatives to Fair Boards: Toronto Industrial, D. C. Flatt, Millgrove, and R. P. Snell, Snelgrove; Ottawa, A. P. Westervelt and J. C. Smith; London, George Green, Fairview, and D. De-Courcy, Bornholm; Peterborough, Robt. Vance, Ida; Guelph, G. B. Hood and James Anderson; Brantford, J. E. Brethour; Belleville and Kingston, J. M. Hurley, M. P.; Provincial Winter Fair, Prof. G. E. Day, G. B. Hood and Wm. Jones.

#### EXPERT JUDGES.

The following are the expert judges recommended for the various breeds:
Berkshires—Wm. Wilson, Snelgrove;
J. C. Smith, Hintonburg; X. Plaunt,
Northcote; Samuel Dolson, Alloa;
Hugh G. Clark, Norval; P. W. Boynton, Dollar; A. W. Smith, Maple Berkshires—Wm. Wilson, Snelgrove; J. C. Smith, Hintonburg; X. Plaunt, Northcote; Samuel Dolson, Alloa; Hugh G. Clark, Norval; P. W. Boynton, Dollar; A. W. Smith, Maple Lodge; Wm. Jones, Mt. Elgin; W. G. Caven, East Toronto; Jas. Mc-Ewan, Kertch; John Boyes, Jr., Churchill; Henry Jones, Zenda; II. J. Davis, Woodstock; J. C. Snell, London; Thos. Teasdale, Concord; Geo. Green, Fairview; Robert Vance, Ida; T. A. Cox, Brantford Jas. Quirie, Delaware; Jos. Featherston, Streetsville; R. P. Snell, Snelgrove; C. R. Decker, Cherterfield; Chas. Youngs, Brooksdale; D. DeCourcy, Bornholm; R. H. Harding, Thorndale; Jos. Barnett, Rockland; E. F. Martin, Canning; H. B. Jeffs, Bond Head; Wm. Linton, Aurora, E. Brien, Ridgetown; G. B. Hood, Guelph; J. E. Brethour, Burford; Alex, Hart, Hampstead; W. A. Shields, Milton. Yorkshires and Tamworths—David Barr, Jr., Renfrew; A. Boyd, Kars; E. A. Kipp, Chilliwack, B. C.; Jas. Bray, Longfurn, Man.: Lon Rogers. Yorkshires and Tamworths—David Barr, Jr., Renfrew; A. Bovd, Kars; E. A. Kipp, Chilliwack, B. C.; Jas. Bray, Longburn, Man.; Lou Rogers, Weston; Geo. D. Betzner, Copetown; R. J. Kerr, Mimosa; W. R. Bowman, E. A. Kapp.
Bray, Longburn, Man.,
Weston; Geo. D. Betzner, Copero...
R. J. Kerr, Mimosa; W. R. Bowman,
Mount Forest; Wm. Jones, Mt. Elgin;
R. J. Garbutt, Belleville; E. Dool,
Hartington; R. H. Harding, Thorndale; N. M. Blain, St. George; A.
Dunn, Ingersoll; J. H. Simonton,
Chatham; G. North, Marden; A. Elliott. Galt; L. F. Master, Haysville;
A. C. Hallman, New Dundee; D. G.
Hanmer, Burford; John C. Nichol,
L. Brethour, Burford; W.
Laurie, Wolverton; Dunn, Ingersoll; J. H. Simonton, Chatham; G. North, Marden; A. Elliott. Galt; L. F. Master, Haysville; A. C. Hallman, New Dundee; D. G. Hanmer, Burford; John C. Nichol, Hubrey; J. E. Brethour. Burford; W. Elliott, Hamilton; A. Laurie, Wolverton; Wm. Davies, Toronto; Richard Gibson, Delaware; Henry Dedels, Kossuth; G. B. Hood, Guelph; Jos. Featherston, Streetsville; H. E. Sharp, Ida; A. F. McGill, Hillsburg; J. G. Mair, Howick, Que.; J. M. Hurley, Belleville; Geo. Gier, Grand Valley; Jas. Stephen, Trout River, Que.; R. McCulloch, Harriston; Jos. Fletcher, Oxford Mills; Robert Nichol, Brussels; A. F. Foreman, Collingwood; J. Y. Ormsby, Woodstock; Jas. Leach, Toronto; Wm. Howe, North Bruce; Chas. Yapp, Brantford; G. E. Day, Guelph; F. R. Shore, White Oak; H. J. Davis, Woodstock; D. C. Flatt, Millgrove; W. R. McDonald, Ridgetown; W. Elliott, Galt; R. G. Martin, Marysville; J. E. Cousins, Harriston; Geo. Green, Fairview; J. W. Callbeck, Augustine Cove, P. E. I.; J. G. Clark, Ottawa; J. C. Smith, Hintonburg; D. Drummond, Myrtle. Suffolks and Essex—Wm. Jones, Mt. Elgin; Geo. Green, Fairview; Thos. Teasdale, Concord; Jas. McGarvin, Chatham; R. H. Harding, Thorndale; Jas. Main, Milton; D. DeCourcy, Bornholm; G. B. Hood, Guelph; R. P. Snell, Snelgrove.
Duroc-Jerseys—D. C. Flatt, Millgrove; Daniel DeCourcy, Bornholm; Major Hood, Guelph; Norman M. Blain, St. George; Geo. Green, Fairview; Wm. Jones, Mt. Elgin; Thos. Teasdale, Concord; J. E. Brethour, Burford; R. H. Harding, Thorndale; W. M. Smith, Fairfield Plains; Jos. Featherston, Streetsville; W. N. Tape, Bentpath; Geo. Bennett, Charing Cross; H. George, Crampton.
Poland-Chinas—Thos. Teasdale, Concord; Jos. Featherston, Streetsville; W. N. Tape, Bentpath; Geo. Bennett, Charing Cross; H.

Geo. Bennett, Charing Cross; H. George, Crampton.
Poland-Chinas-Thos. Teasdale, Concord; Jos. Featherston, Streetsville; Jas. Main, Milton; Geo. Green, Fairview; W. M. Smith, Fairfield Plains; Wm. Jones, Mt. Elgin; Henry Jones, Zenda; Oliver Drury, Fargo; C. W. Yalp, Brantiord; R. Willis, Glen Meyer; R. H. Harding, Thorndale; Lawrence Tape, Ridgetown.
Chester Whites-F. D. George, Putnam; R. E. Birdsall, Birdsall; Albert

(Continued on next page.)

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besides leading prizes too numerous to mention at all the principal agricultural shows in England.

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Imported and home-bred prizewinning aged sheep After the Pan - American a number of particularly good ram and ewe lambs, Collie pupples by imported Holyrood Leek and champion Alton Monty, out of noted prizewinning dams.

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