

ories and creameries fit in well with hog-raising, and with cheap, coarse grain and millstuff, and with roots and clover readily available, the Canadian farmer is in a position to produce pork and bacon suited to the demand at a minimum of cost, and with judicious management there is money for him in this branch of his business—a branch which will bear almost indefinite expansion, since under present market conditions the limit of the life of the average hog is only about half a year.

If the inditing of this article be instrumental in leading our readers to a more correct comprehension of the great importance to our people, individually and collectively, of our live stock interests, and of the wisdom of applying ourselves to the improvement of our stock and the expansion of our trade in these lines, and if our effort serves in any degree to inspire to resolution and action in this direction, we shall be more than repaid for the time and study expended upon it.

Fair "Ingleside"—Home of the Herefords.

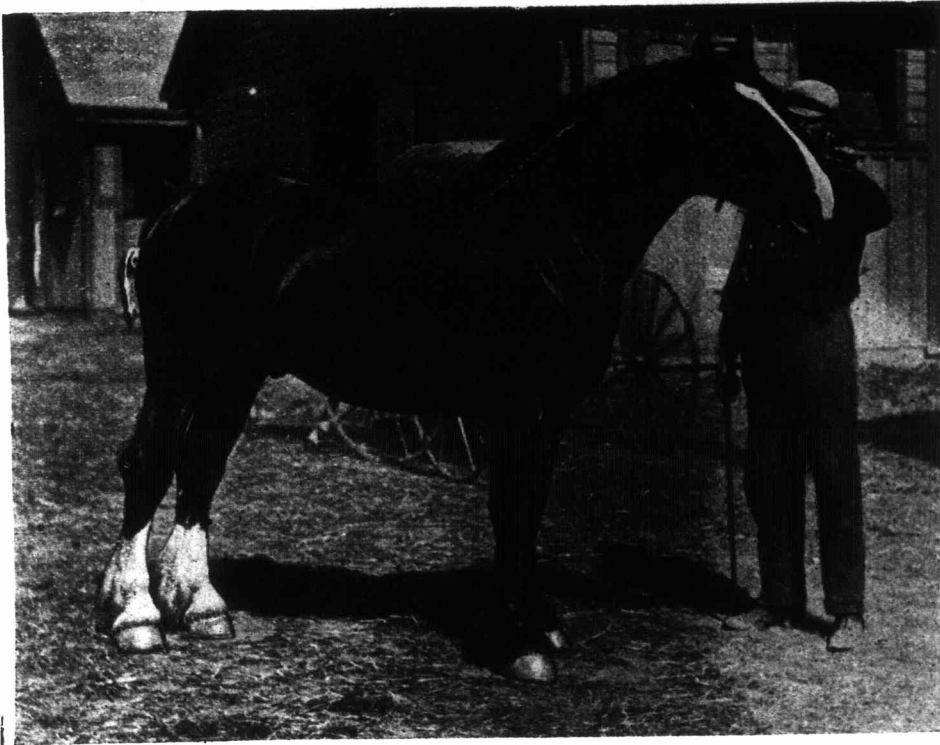
Beautiful for situation, on the outskirts of the pretty rural village of Compton, in the rich and rarely productive district of fine farming land known as the Eastern Townships, in the Province of Quebec, commanding a charming and extensive landscape view which embraces the New Hampshire hills and the distant White Mountains in Vermont, is "Ingleside," the ideal farm homestead of Mr. H. D. Smith, breeder and owner of the champion herd of Hereford cattle in Canada. The farm, consisting of about 950 acres, about 300 of which is arable, the balance in hay and pasture, is a rich clay loam, gently undulating and well drained. The farm buildings are well arranged, commodious and comfortable, consisting of five detached barns, each devoted to a distinct section of the work of the farm, all in line, facing the farm road and sufficiently separated to reduce to a minimum the danger of all being destroyed in case of an outbreak of fire. The handsome and commodious dwelling, large, light and cheery, planned by Mr. and Mrs. Smith for comfort, convenience, and healthfulness, is furnished with all the modern improvements and conveniences of the model city home, and stands on an elevation commanding a view of the whole farm and of the charming scenery in the distance. The water supply for the dwelling and all the farm buildings is by gravitation from springs on the farm, conveyed by pipes to troughs in front of the cattle in the stables, and on tap wherever needed in each separate department. A fifteen-horse-power engine furnishes power for threshing, grinding, cutting straw, sawing wood, and steaming food, and while at such work is further utilized in generating electricity, accumulating and storing it in batteries for lighting the buildings and supplying power for the lighter machinery in the intervals when the engine is not running. By this arrangement a sufficient supply of electricity is generated and stored to furnish the one hundred incandescent lights in the house and farm buildings for three to five days in winter and ten in summer. A complete telephone service connects the various outbuildings with the office of the owner in the dwelling house, an arrangement which does not conduce to the comfort of the host at meal times, when he is supposed to be at home and subject to the ringing up and "hello" process.

The stock on the farm on the occasion of our visit was 140 cattle, 100 sheep, 21 horses, and 60 hogs. The cattle are divided into three sections—breeding, feeding, and dairy—and each department of the farm is handled with a view to profitable production, the whole being under the eye of the owner, who is intensely practical, and has a personal knowledge of the minutest details of the business, and evidently runs it without friction, from the fact that the employees occupying the neat and comfortable cottages on the farm are those who went into them when they were built seven to nine years ago. While every department of the farm receives careful and critical attention, the fine herd of Hereford cattle, now numbering some sixty head, is the special object of the owner's ambition, and of his peculiar care. Mr. Smith is evidently a born cattleman, having that intuitive taste and sentiment which marks a man a master in his profession, and his matured judgment, the result of experience and close observation, has given him the position he holds to-day as leader in the list of Canadian breeders of Herefords. For so young a man, being only in his thirty-first year, and one whose early years were mainly spent at school and in travelling, Mr. Smith's aptitude as a judge and breeder can only be accounted for by his natural love of animals and of rural life, coupled with his application of thought and study to the science and art of breeding. Mr. Smith's ideal of a Hereford is realized in the modern type—an animal of medium size, smoothly turned, clean-cut, and thickly covered with natural flesh, having abundance of fine, silky hair, a rich yellow skin, mellow handling, and, withal, that indescribable quality known to the connoisseur as *character*, which marks an animal as a prince or a princess among its peers. Uniformity of type, and that a profitable one, founded on the bedrock of individual merit by inheritance, has been the aim of the owner of the Ingleside herd, and that success has rewarded his efforts in this direction is amply evidenced by the record of his cattle in competition in the leading showings in the Dominion, and by the fact that for three years in succession the champion male and female of the breed at the three greatest shows in Canada has been found in this herd, and that in the last three years the first

and second herd prizes at these shows have gone to Ingleside.

Standing at the head of the show herd is the doughty champion, Amos of Ingleside 58488, illustrated in group in this issue, now in his four-year-old form, having been born on his way home from the World's Fair at Chicago. He has been a great show bull as well as a successful breeder, having attained a weight of 1,600 pounds before he was two years old, a marvel of early maturity, yet he carries his added weight well on strong, straight legs, and is as smoothly fleshed as a yearling, having straight top and bottom lines, long, level quarters, and full, deep thighs, a broad chest, full brisket, and fine handling quality. To mate with the daughters of Amos and the larger class of cows in the herd to secure and intensify the desired type, a young bull was some eighteen months ago selected from the Weavergrace herd of Mr. Sotham, of Chaillicothe, Mo. He is Sir Horace 63688, a two-year-old inbred Horatius bull, by the great show bull and sire Corrector, dam Princess Jenny 22579, by Horatius. He is a lowset, smoothly-turned bull, with a handsome head and slightly drooping horns, a strong muscular neck, a well-fleshed back, full twist, and thick through the flanks, carrying 1,600 pounds on straight legs, and showing no paunchiness, but a compact, well-proportioned carcass, such as a butcher would estimate at a high percentage of high-class meat. This bull is proving a happy nick with the cows in the Ingleside herd, as about a dozen of his calves from two to six months old attest, being broad, deep and thick, and covered with fine coats of hair. He has been a first prize winner in his class through the whole round of the fairs, and has proved all his owner predicted for him.

Prominent among the matrons of the herd is imported Lady Tushingham 3rd, now nine years old, winner of first prize and sweepstakes for several years everywhere shown. She has been fitted for the fairs for eight years in succession, and has been a regular breeder, her last calf having been born in April last, but her wonderful constitution has car-



GOLDFINDER II, CLYDESDALE, OWNED BY JAMES HENDERSON, BELTON, ONT.
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ried her through in a state of freshness and smoothness that is remarkable. Her broad, strong back, thickly and evenly covered, the splendid spring and packing of her ribs and crops and levelness of under line make her a model of the breed. Spot 3rd, seven years old, by Anxiety 4th, dam imported Sylvia, a first prize Royal winner, has stood only second to Lady Tushingham 3rd for several years in the round of the fairs, and she is one of the best of the breed, being lowset, deep, and well filled in all her parts, with a sweet face, neat horns, and smooth shoulders. She has made a great record as a breeder, having raised five calves, and she is a good milker as well, having nursed her calf during the circuit of the fairs and kept it in show condition. Own sister to Spot 3rd is Cherry 25th of the same general character, a tribute to the excellence of their noted sire, whose breeding is backed by merit and performance as a producer of prizewinners. Sylvan 3rd and Jessie of Ingleside are the two young cows which appear in the colored plate illustration in this paper, and the calf is the daughter of the former, by Sir Horace. Sylvan 3rd was the first prize three-year-old cow everywhere shown this year, as well as the first prize two-year-old last year, and is a daughter of Spot 3rd, by Pinkham of Ingleside. She speaks for herself in the lifelike likeness, as also does Jessie, a granddaughter of Cassio, champion of the breed in Canada for several years, herself the winner of first-class honors clear round the circuit of the ninety-seven shows, and Daisy of Ingleside, first prize yearling on the same circuit, is molded after the same pattern—smooth, level, and thick. Princess Bonnie, by Kodac of Rockland, richly bred in Anxiety blood is a deep, fleshy 2-year-old heifer, with baby calf at foot.

A notable feature of the herd is the bevy of beautiful heifers, seven in number, imported from England this year, having been selected by Mr. Smith in person from noted herds in the Old Country. Besides these was also imported at the same time the matronly young cow, Miss Gift, now about four years old, winner of second prize at the Royal Show this year, and virtually the first prize cow, since the one placed above her having failed to qualify under the

rules, the first money goes to Miss Gift. She is by Silurian and out of Rubella, and is in calf to Gold Box, by Knight of Leinthal, dam Saucebox 2nd, by Auctioneer, and is one of Mr. Tudge's best family. She is a cow of great substance and fine quality, with a grand back, well-sprung ribs, level lines, and strong breed character, and should prove a valuable acquisition to the herd. Of the seven imported heifers, one is two years past, five are yearlings, and one is a calf, and a smooth, even lot they are, all of similar type, with neat, down-set horns, mossy coats, short legs, deep bodies, and well-covered backs—just such a lot as one might covet for a foundation on which to build a model herd. The two-year-old is Duxmoor Brenda, by Lancelot, dam Brenda, by Bourton, sire of Ancient Briton, champion of the breed at the World's Fair. The yearlings are (1) Lady Bountiful, by Bourton, dam Bryonia, by Viscount Wilton; (2) Lady Rupert, by Rupert, dam Rubella, by Hartington, by The Grove 3rd; (3) Chatterbox, by Rupert, dam Saucebox 4th, by Ancient Briton; (4) Roseleaf, by King Arthur, by Ancient Briton; (5) Ruby, by Rupert, by Ancient Briton, dam Saire. The heifer calf is Frivolty, by Rupert, by a grandson of Assurance, own brother to Anxiety 4th, dam Downton Finetta, by Lancelot.

Space available would fail us to mention the many excellent home-bred young cows, heifers, and heifer calves which constitute the balance of the female side of the herd, and which are all of strikingly uniform character, while the few robust and shapely bull calves on hand can only be referred to in bulk as promising well for usefulness as sires and show bulls, being of the fleshy sappy, mossy-haired sort that delights the eye of the breeder.

To prove the prepotency of Hereford bulls in grading up from common cattle, Mr. Smith is preparing some grades for the fat stock show, which will not fail to make a favorable impression on those who see them. A yearling heifer, representing three crosses from a native cow, is a model in conformation of the ideal butchers' beast—long, low, and level, with evenly-covered back, long, straight quarters, well-sprung ribs, and freedom from all indications of excess of offal; she fills the bill to satisfaction. A steer calf, eleven months old, the result of two crosses of Hereford bulls on a Shorthorn grade, is a marvellous example of early maturity, large and full of flesh, and symmetrical in his proportions to a high degree. He will be hard to beat in any company he meets. Taking it all in all, such a herd is seldom seen in any country, and it reflects credit upon the skillful breeder and happy owner, as well as upon Fred. Norton, the faithful herdsman, in whose hands the cattle have had such a successful career.

Agricultural Education.

BY JOHN DEARNESS, PUBLIC SCHOOL IN-
SPECTOR.

Most people admit that a national system of education perfectly suited to a country will be framed with some regard to the conditions and chief occupations of its people. Some who do not accept this proposition, take the ground that the state exceeds its duty when it undertakes to make education free any further than what is equally suitable and equally necessary to every citizen; others define the measure of such duty as to provide an education that will qualify every capable citizen for the intelligent and free exercise of the franchise, so that the safety of the state may not be imperilled by the ignorance of its people. But so far, those who would limit the course of free instruction to what is of equal value to everybody, like those who would limit it to what is simply necessary for the protection of the commonwealth, have been unable to agree upon the subjects and limits of such education. In the meantime, the majority of those who, while accepting that education is necessary to the state for protection, believe also that the liberal education of the youth is a wise and profitable investment for a state, have been going on making laws, framing courses of instruction, and developing a policy of supporting wholly, or in considerable part, with public funds, institutions of elementary, advanced, and technical learning. Under this policy, too, the temperance people have had physiology and temperance placed on the public school course of studies, and parents who wished their children to become accountants or stenographers, have seen bookkeeping, banking, and stenography placed on the high school course. If the farmers desire it, they have equal reason to demand that agriculture be taught in both public and high schools.

Leaving out the merely instrumental parts of education, such as reading, spelling, penmanship, and the four simple rules of arithmetic, it may be said of the rest that the *method* of learning is of more importance than the *facts* acquired. Knowledge may be stored in the memory by a method popularly called cramming, or it may be acquired by mental processes which exercise the reasoning faculties, strengthen the judgment, and increase the learner's mental capacity. The mental discipline and increase of power gained by a proper method are usually far more valuable than the information lodged by it in the learner's memory. This statement is true of literature, of mathematics, of the physical and especially of the natural sciences.

Agriculture is both a science and an art. With agriculture as an art or trade the general schools