parts of quartz sand with one part of sodium carbonate and one-tenth part of small coal. Most of the soluble glass or water-glass which is on the market is used for making artificial stone, but large quantities are used for rendering wood fire-proof, as a detergent, and for protecting natural stone of good quality but which does not weather well. These uses suggest the reason why water-glass is so useful in the preservation of eggs, for in solution it enters the pores of the egg and probably combines with the calcium carbonate of the egg shell, forming an impervious cement, which prevents the ingress of air and the germs which it may contain. It ought to be pointed out that treatment with water-glass, as with lime water, will reduce the elasticity of the egg-shell, so that when the contents of the egg swell during boiling, the shell will crack unless relief is afforded by puncturing one end with a fine needle immediately before cooking.

In order to use water-glass successfully, the following plan should be adopted; Take one part by measure of water-glass (one gallon) and ten parts by measure of water that has been well boiled and cooled (ten gallons). Place the water and the water-glass in the vessel in which the eggs are to be preserved, and stir the ingredients well together; then put in the eggs, or the eggs may be packed in the vessel first of all, which is perhaps the better plan, and then the mixture of water and water-glass poured over them until the topmost layer is completely covered. The reason for boiling the water is obvious to anyone who knows that the process of boiling kills any putrefactive germs which may happen to be in the water at the time, but great care must be taken that the water is not used hot or even warm; it should be cooled down to the temperature of the air before the water-glass is mixed with it and the mixture poured over the eggs. On the whole, it is the best plan to purchase water-glass of the best quality, and even then it is quite cheap. It is generally bought by the cwt., and, although the market varies, it ought to be procurable at about 10s. or 12s. a cwt. The reason why we recommend purchasing the best is that sometimes common kinds of water-glass affect the fingers in handling and if such is employed there will probably be trouble with the workmen, who are quick to object to anything which, as they say, "perishes" the hands.

Eggs kept in this solution of one part water-glass and ten parts of boiled water have been known to keep good for at least nine months, but it goes without saying that the eggs must be fresh when they are immersed in the solution.—*The London Grocer.*

The third annual excursion of the Halton Farmers' Institute to the Model Farm at Guelph will take place on Saturday, June 25th. The fares are placed at a very low rate, and every farmer in Halton who can possibly leave home should unite with the members of the institute in making this the most successful excursion which has ever been organized in that locality. Particulars and rate may be obtained from Dr. Robertson, Milton, J. L. Warren, Esq., Acton, or the secretary, W. B. Robbins, Esq., of Freeman.

CORRESPONDENCE.

ILLUSTRATION STATIONS FOR FARMERS.

Editor of FARMING:

Having seen in your columns Professor Robertson's scheme for illustration stations, I would say that such would be the grandest move possible for the aid of farmers and the public thereby. The great want on the farm being manure, in addition to that made on the farm, and to know what quantities and which fertilizers are the best on the different soils. If men had confidence in the different fertilizers (of repute) they would use them more largely, and thus greatly increase the products of the country. In fact what men want to know and see through illustration experiments by reliable disinterested farmers is the effects of fertilizers as compared with unmanured plots in the different soils of the country, or in other words, how will they profit them to use for present and permanent effect?

The object should be not so much to test different kinds of seeds and the quantities sown, but to know if the commercial fertilizers deserve the praise and value which their manufacturers give them? If so, they would be sold in tons in place of 100 lbs., and the crops of the country nearly doubled.

Hence, a few illustration stations in different parts or on different soils: on clays, clay and sandy loams, dry or damp, etc., where "seeing is believing," would be of untold benefit to the farming interests of the country.

A. B. CROSS.

Brookfield, N.S.

J. E. BRETHOUR LEAVES FOR ENGLAND.

Mr. J. E. Brethour, of Burford, Ont., left for England on June 11th on a purchasing tour. During his trip Mr. Brethour will visit the leading summer stock shows in Great Britain, among them being the Royal Show, which this year will be held at Birmingham. As the readers of FARMING are well aware, Mr. Brethour is the proprietor of the Oak Lodge herd of Yorkshire swine, and his purpose in visiting England at this juncture is to import a number of Improved Yorkshires to add to his already celebrated herd of bacon hogs. Mr. Brethour has great faith in the future of the Canadian bacon trade and believes that the Yorkshires are well adapted to meet the needs of this trade. His desire to keep his herd up to the highest English standard, and thereby assist in keeping up the high standing of Canadian swine, is to be commended.

In addition to purchasing stock Mr. Brethour will make a study of the English bacon trade when in England. As he has made a special study of the Canadian end of the trade during the last few years Mr. Brethour will be in a position to secure information of value to every swine breeder in this country during his trip to Great Britain.

GASOLINE ENGINES.

The rapid development of conditions favorable to the production of all kinds of agricultural commodities with economy of time, labor and material, has created a demand for various devices designed for the purpose of supplying the power required in operating farm machinery. Naturally, farmers are interested in any machine which promises to do the required work cheaply and effectively with materials easily obtained. This, no doubt, has led to the interest shown in the gasoline engine manufactured by The Northey Manufacturing Co., Limited, of Toronto, as evidenced by the number of enquiries concerning it which have lately reached this office.

In order that he might be able to satisfy the curiosity of those interested a representative of FARMING visited the extensive work shops of the company for the purpose of seeing the engine in course of construction and determining for his own satisfaction how far it filled the requirements of a convenient and economical motive power adaptable to the uses of the farm. What he found may be summed up in a short description of the engine from his point of view, which is neither technical nor professional. The Northey Gasoline Engine is certainly convenient in form and size. The one-horse power engine, which is the smallest one made, occupies a space of twenty inches square, and weighs about 500 pounds. The power is wholly generated by gas or gasoline. Where natural or manufactured gas is obtainable it may be used to advantage, but gasoline is commonly used in nearly all rural districts. The gasoline is forced from an iron tank placed outside buildings by means of a small pump on the base of the engine, into a cup, from which it is allowed to descend in proper quantities to the cylinder, where it comes in contact with the amount of air required to form an explosive gas. This gas is ignited by an electric spark produced by means of a small battery of eight cells, which furnishes the current needed for the purpose. The ignited gas heats the air in the expansion of which sufficient force is acquired to furnish the power. The whole thing is most simple, the principle applied being merely that of expansion of air by heat. As gasoline is not explosive, except when its vapor is mixed with a certain quantity of air and a light applied, and as this condition only exists within the strong cast-iron cylinder, safety is one of the strongest characteristics of the engine. There is no boiler, no fire, and practically no heat about the engine. Water is used only as a means of cooling the cylinder. For a day's run of ten hours one pailful per horse power will be found ample for all the requirements of the engine. The consumption of gasoline is not more than $\frac{1}{10}$ of a gallon of seventy-four degrees gasoline, at a cost of about $1\frac{1}{2}$ cents per horse power per hour. There is no engineer or fireman, no coal or wood, no ashes or cinders, and no danger from fire. It is always ready for business, and may be put into operation in less than a minute at any time. It is available for running all kinds of farm machinery requiring power. The medium and small engines may be bolted to an ordinary six foot stone boat and carried to any part of the farm where required. There is no steam to generate, only a trifling amount of water to draw, and as there is no fire there can be no danger.

From this necessarily imperfect description the reader can at least draw some conclusions as to its adaptability to his own particular uses. If he is interested in it, his better plan would be to see the engine for himself, or write the makers for full particulars.

BOOKS RECEIVED.

Suffolk Flock Book, Vol XII. Rams, Nos. 4442 to 4808. Published by the Suffolk Sheep Society. Bury St. Edmunds, Eng., 1898.