

put a little sand under each bulb. Hyacinths should be eight inches apart each way, and four inches deep. Tulips six or seven inches apart, and about three and a half deep. Crocuses may be nearer; three inches distant and two deep. Snow-drops, about the same as crocuses. Lilies are to be at least a foot apart each way, and five inches deep, and the same distance for the Crown Imperial. In making up the beds, it is well to leave them a few inches above the general level, as they will settle during the winter. Though the bulbs mentioned here are all perfectly hardy, yet they will come out all the stronger in spring, if covered when cold weather sets in, by a layer of littery manure, or leaves, which last may be kept down by sprinkling a little soil over them. Bulbs may be potted now and kept in a cool place until frosts come, when they may be placed in the cellar, from which they are to be taken during the winter at intervals, a few at a time, to a warm room to flower.—*Agriculturist*.

CHALK FERMENTS.

Chemists and Naturalists often cross each others paths. The naturalist ventures beyond his bounds and propounds a theory or states a so-called fact which the chemist at once upsets; and the chemist in his turn starts a hypothesis or gives explanation of a phenomenon which arouses the indignation of the naturalist. To this latter class belongs the paper of M. A. Bechamp, in a recent number of the *Comptes Rendus*, translated in "Chemical News" (19th Oct., 1866), in which he shows to his own satisfaction, but not to ours, that there are present in chalk living molecules which act as ferments, and that the part played by chalk in Butyric and Lactic Fermentations is due to these molecules. In these cases assuredly chalk acts simply as a chemical compound, and not by the exertion of any physiological action. The mobile corpuscles observed by the same author in the waters of Vergeze are "supposed" to be the cause of the formation of volatile fatty acids in these waters. It may be supposed, likewise, that M. Bechamp is mistaken.

NATIVE SULPHUR.—Several samples of a greyish black substance with slight metallic lustre have lately been brought by different parties to the Laboratory of Dalhousie College, for examination, in the belief that they were metallic ores.—On analysis, these samples were determined by Professor Lawson to be not metallic ores, but *Native Sulphur*, a substance that had not previously been known to occur in Nova Scotia. In the first specimen examined the dark colour was found to be due to plumbago, and not to

the presence of metallic oxides or sulphides as is commonly the case in Sicilian specimens. The substance is very light, specific gravity 2.0, and when heated in an iron spoon takes fire and burns with a blue flame, giving off sulphurous acid. The manufacture of pure sulphur from this substance would be a very simple process.

SMALL TALK.

The proceeds of the sale of Canadian Cattle and Sheep, on 2nd November, amounted to \$2711.50.—The *Gardener's Monthly* says that Quince cuttings rarely fail if set in the fall.—The *American Agriculturist* for November figures a splendid Merino Ram, whose fleece this year weighed 26½lb. The price of \$15,000 has been refused for him.—Mr. Decie of Wilmot has a number of pure Berkshire pigs for sale.—Thursday, the 15th Novr., is Thanksgiving Day.—Spelt is being grown in the States.—Goodrich potatoes are selling in the States at \$4 a bushel.—Magnesium rods are now used instead of zinc for detecting arsenic.—Mr. George Plumb, who brought out the Government Horses last year, returned by the *China* last week.—Fire proof gloves of asbestos, enabling an assayer to hold a heated crucible, are now sold in Hungary for \$20.—In the State of Nevada a mountain of salt, "several thousand feet in height," has been found.—A Chemical Laboratory is being erected at Bonn for the Rhenish Frederick William University, which will cost \$100,000.—At Worthing, a field of Italian Rye grass dressed with town sewage, has yielded a cutting of wholesome cow-feed at the rate of 20 tons to the acre.—Mr. Fisher Hobbs, who, in conjunction with Lord Western, originated the famous Esse breed of pigs, has just died. The Esse breed originated from crosses between the Naples, Essex and Berkshires.—Purchasers at the Government Sale of Live Crock at Richmond have in several instances been offered advances equal to nearly double the prices paid.—One of the Canadian bulls in being shipped at Halifax fell into the Harbour, but was rescued.—The Glasgow Horticultural Society has an income of \$5,500, and distributes \$3000 in prize money.—Mrs. Miller is in England preparing another series of her beautiful drawings of Nova Scotian wild flowers.—It is now time for intending exhibitors to commence preparation for the Provincial Agricultural Exhibition to be held in 1868.—The Board of Agriculture has obtained a quantity of the best Canadian Seed Wheat, Peas and Beans.—A new trade is springing up in the export of Wool from British America to England.—There is not enough wool in the States to clothe the people, and the duties are so high they cannot afford to import it.—The weather this fall has been very favorable for

ploughing.—In the Street Cars the other day, an old countryman descended contemptuously upon the Halifax houses as covered with "wooden slates."—At the Nova Scotia Institute of Natural Science on Monday evening, Dr. Gilpin read an interesting paper on Furs. It was the smallest meeting we have attended.—The last quarterly number of the *Edinburgh Journal of Agriculture* contains a vivid picture of the late Hugh Watson of Keillor, "by one of his daughters."—Hugh came of a "good old stock," enjoyed the "merry days when he was young," kept a racer and put many trophies on the sideboard at Keillor, became a trooper in the *Argus* Yeomanry, ran mail coaches till they were run off the road by railways, moved with the times into a railway director, introduced the use of bone dust into Scotland and erected the first bone mill, acclimatized Jonas Webb's Southdowns on the Sidlaw Hills, and originated the far-famed Angus breed of black polled cattle. He could sing a good song too, and became almost pathetic over "The Ewie wi' the crookit horn." Personally we have lively recollections of the genial gentleman farmer, and of his wife and daughters on their weekly visits to town on market days, and our special thanks are due to this daughter who has sketched as graceful a biography as we have read for many a year.

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