Hides and Wool.

Prices at Montreal declined last week ½c to 5½c for No. 1 light, 4½c for No. 2, and 3½c for No. 3. No. 1 heavy steers, 6c; Calfskins, 6c for No. 1, and 4c for No. 2. Lambskin 40c each, and clips 25c.

The Toronto Globe says: "With a lack of export demand and dullness on the other side the local wool market is depressed and very little business is being done. Wool is accumulating at outside points, as holders will not accept the offers of dealers. Prices are easier. Selected country lots are worth 19c for washed fleece.

Nothing is doing in hides at Toronto, and values have gone down with the prices in the United States. Quotations are: No. 1 steers 60 lbs and up, 6c; No. 2, 5c; No. 3, 4c; buff hides, 5½c for No. 1, 4½c for No. 2 and 3½c for No. 3. Lambskins are steady at 40c for fresh slaughtered and 25c for pelts. Horsehides, $1.50 to $1.75 each. Tallow, 3c to 3½c.—Globe, Aug. 14.

Red Rust and Wheat.

Will red rust injure wheat? Dr. Luger of the Minnesota Experimental Station at St. Anthony Park replies in the affirmative. There has been a difference of opinion in the grain trade as to the effect of rust. Dr. Luger's statement indicates that both sides may be right in their theory. Rust may not seriously injure wheat, but it has the power to do it under favorable conditions.

Dr. Luger said to a representative of the Minneapolis Journal: "I have recently returned from the northwest where I found a great deal of red rust on wheat. Plants less than six inches high are covered with it. There is not much hope for improvement unless we can have a rainy season, and it is now too late to expect much from that source. A series of rains would wash the rust spores off the wheat, and once on the ground they are lost, that is as far as distribution is concerned, for they adhere there and grow."

Dr. Luger admitted the puzzling nature of this plant life, for such rust is. There is no known remedy with which to combat the work of the parasite successfully, and Dr. Duger advocates that it be given careful and persistent study until a remedy is found. Professor Burrill, of Illinois estimates that the annual loss from rust on wheat in that state on a basis of 75c a bushel is $375,000, which will suggest that the loss from rust in the northwest on a crop of 125,000,000 bushels is a very important item.

Dr. Luger says: "The ravages of injurious insects, such as chinch bugs, army worms and migratory locusts have been insignificant when compared with the losses sustained by the minute plants causing rust."

The vegetable parasites causing rust, Dr. Luger explained, belong to the order of general fungi (mycomycetes), to the suborder of basidiomycetes, and to the family or rust fungi. All fungi, which produces or causes rust, are parisites whose mycelium, or vegetable portion grows in the tissue of their hosts; they form below the epidermis of that host larger or smaller aggregations of spores, which remain either covered by the epidermis, or penetrating it, are free[illegible] osed upon its surface. In the latter case they appear upon the leaves and stems of the infested plant as rust colored, dust-like spots or as crusts.

"These plant spores, or seeds, are held in irregular shaped pockets in the leaf, and number 500 to 800 spores in each pocket," said Dr. Luger. "These spores are perfect globular bodies. Their function is the same as that of common seed. They are not visible to the naked eye. As they ripen they loosen, until, breaking away, they are carried up into the atmosphere, often to great heights, until they strike the opposite air currents, when they are carried over the country until rain filters the atmosphere, bringing down the spores onto the plants, or untill they fall with down currents of air. As soon as the spores are moistened there is a rupture, and the whole inside crawls out like a worm, and it feels about for an opening in the leaf by which it can enter. It is too delicate to break the epidermis of the leaf, and keeps working until it finds a breathing pore, and through this goes inside the leaf. It there consumes the food brought with it from the pocket, and when that is consumed it sends out little suckers that attack the plant cells and at this point the injury to the plant begins."

Irrigation by Wells.

A publication of special interest to all who live in the arid regions, is the recent report of the United States Geological Survey entitled "The Public Lands of the United States and their Water Supply," by Frederick Haynes Newell. The colored maps accompanying this document are of great value, especially the one showing the areas of heavy forests, those that are lightly timbered, and the irrigated areas. It appears from this map that the greatest progress in irrigation has been made in California. Utah and Colorado make a good showing, and so do Wyoming and Montana. Comparatively little has been done in Washington, Idaho and Oregon. Taking all this arid region together, it appears that only between one and two per cent of the land can be designated as improved, while the total area under irrigation was found by the census of 1890 to be only 3,631,381 acres, or about half of one per cent of the area of the States within which irrigation is largely practiced.

In relating to irrigating from wells, the report says: "Although by far the greater part of the acerage of the lands made valuable by the artificial application of water is dependent upon streams, yet wells play a very important part as sources of prosperity. These may be divided into two classes—the artesian or flowing wells, and those from which water must be pumped or lifted by various devices. The flowing wells are local phenomena, and although attracting popular attention by their novelty, are not worthy of consideration to the exclusion of the ordinary form of well. In many of the older countries wells have been employed in irrigation since the beginning of historic records, and water has been lifted considerable distances to be applied to growing crops. It is, however, only within a few years that the practicability of utilizing any notable extent of the public domain through this agency has received general recognition. It is true that market gardeners have used windmills and other devices from time immorial, but that this insignificant method of irrigation would ever be of public importance has been almost entirely overlooked.

"Experience in various parts of the country has shown that a farmer who will content himself with a few acres and utilize his resources to the best advantage can make a good home and living upon the arid or semi-arid lands by means of agriculture rendered possible by water pumped from a well. The greatest progress in this line has been in semi-humid States, including the broad belt from the James River Valley of the Dakotas southward through western Nebraska and Western Kansas. There a relatively large population was almost without means of support, owing to the occasional or periodic droughts. After many experiments and failures it was found that continued success was obtained mainly by those who practised irrigation, this being possible in many localities only by means of well water. Attention being drawn to this fact, systematic endeavors have been made to perfect methods and apparatus, until at the present time large numbers of men are employed in sinking wells and in erecting suitable machinery for bringing the water to the surface and storing it for use as required. There is every reason to believe that continued prosperity will follow the development of small farming in this manner, especially when combined with stock raising, upon the broad grazing lands of the West."

Freight Rates and Traffic Matters.

The Montreal Trade Bulletin of August 14 says: "Considerable engagements have been made this week for grain at firm rates, 2s having been paid for Liverpool, and 2s 3d for London with 2s 6d asked. For Bristol 2s 4½d has been paid, and 2s 6d is now asked. For Glasgow space has been taken at 2s 3d, and that figure is bid for more. The sack flour market is quiet at 12 6d London, 11s 9d Glasgaw, and 10s Liverpool. Engagements of cheese have been made at 20s London, 25s Bristol, 25s Glasgow and 20s Liverpool. To Hamburg and Antwerp, grain is quoted 2s 6d; provisions 17s per 100 lbs; and flour 13s 9d. Provisions 12s 6d to Liverppl, 12s 6d to 15s London and Glasgow. Cattle 40s to 42s 6d. There has been further business in grain freights during the week via the St. Lawrence route. The rate on wheat from Duluth to Montreal is 5½c per bushel, and from Fort William the same. Chicago to Kingston, corn, 2¾c. From Kingston to Montreal 2½c and 2c on wheat and corn respectively, and from Prescott to Montreal 1¾ corn and 1½c oats.

Owing to the fight between the Chicago and gulf lines for the grain trade, rates have been cut very low from western points. Rates from Missouri river points to Chicago have been reduced one half, and one third between Chicago and the seaboard. Still much grain is going out via New Orleans and Galveston.

Grain and Milling.

On August 8. the flour mill of Cawthope, at Ridgetown, Ont, was destroyed by fire. The loss on the building will be $20,000; stock in the mill, $1,000; insurance, $9,000.

Moldrum & McDougall, have closed a contract with R. P. Roblin, of Winnipeg, grain merchant, for the erection of three elevators, at Gretna, Austin and Deloraine, respectively. This firm has also contracted to build three elevators for Dyall & Co., of Souris, and are building a number for the Northern Elevator company.

The local grain market was again quiet says the Montreal Gazette of Aug. 17, and business in all lines was slow. In oats the feeling was weaker, and prices have declined ½c per bushel, which is due principally to the large stock in store here and the free offerings. The demand is slow at 25½c for No. 2 white.

The Morden Herald says: "Adamson & Parker bought the first new wheat marketed in Morden this year. The wheat was No. 1 hard and brought 46 cents.

There was a flurry of snow at London, Ontario, on August 19, and indications of a slight frost.

B. S. Jenkins, superintendent of the Canadian Pacific Railway telegraph system, left last week on an inspection trip over the western division. New lines are being constructed in the mountains, extending the telegraph service into new mining districts. This year the telegraph service in the west has been a singularly free from injury by storms or accidents.