MICROSCOPY AND CRIME.

"A curious use of the microscope," says the *British and Colonial Druggist*, "was lately made in Prussia A barrel of specie from the frontier arrived at Berlin, emptied of its precious contents, and filled with sand. Professor Ehrenberg, the eminent chemist, was consulted on the subject, and immediately sent for samples of sand from all the stations along the different lines of railway through which the barrel had passed, and by means of the blowpipe and the microscope identified the station from which the interpolated sand must have been taken. In due time the culprit was discovered to be one of the clerks at this station." Commenting on this story, the *National Druggist* says: "If the annals of some of our larger establishments were written, we should doubtless find that the microscope had done good service on many occasions."

ROPE TRANSMISSION OF POWER.

The plant of the Milwaukee Dry Dock Co. presents an interesting application of rope transmission of power. The outfit is of the Dodge patent American kind, and was installed by the Milwaukee Rice Machine Co. Power is transmitted by means of a single one-inch rope more than 200 feet from a 100 horsepower engine in the blacksmith shop to the sawmill. These shops stand at an angle of about 45 degrees. The engine wheel is 96 inches in diameter, has eight grooves and transmits power to a sheave with a diameter of 6 feet and grooved for ten warps of the rope. Two of these grooves are used to drive an auxiliary shaft. One continuous rope transmits power direct to the shaft in the sawmill.

AN UNEXPECTED REJOINDER.

The Philadelphia *Record* tells a story concerning President George B. Roberts, of the Pennsylvania Railroad, in connection with an inspection tour over the lines of the company. The inspection party was riding over one of the branch lines of one of the numerous divisions of the big system, accompanied by the superintendent of the division. The branch happened to be an exceptionally crooked one, and as the superintendent was chatting with President Roberts the car made a sudden lurch going around one of the sharp curves, which led the superintendent to remark to his chief that "the engineer who built this branch knew d——n little about engineering." With a merry twinkle in his eye the president replied: "Yes, that is so. But I was very young when I located the road, and I know better now." The superintendent was completely discomfited by this reply, not having been aware that the then president of the Pennsylvania Railroad had, when quite a young man, located and done the engineering work thereon. President Roberts, on the other hand, took this somewhat severe criticism on his early work as a good joke.—*Engineering Review*.

THE UNITED STATES MINT.

The report made last week to the Secretary of the Treasury by the Director of the United States Mint for the fiscal year ended 30th June, 1897, covers the operations of the mints and assay offices, together with the statistics of foreign countries, relative to production and coinage of the precious metals and the monetary condition of each. The value of the gold deposited at the mints and assay offices during the fiscal year, 1897, was as follows: Domestic bullion, $60,618,239; mutilated and uncurrent domestic coin, $1,015,314; foreign bullion and coin, $22,559,534; old plate and jewelry, $2,810,248. The purchases of silver bullion for subsidiary silver coinage, under the provisions of section 3,526, revised statutes of the United States, aggregated 259,248 fine ounces, costing $171,455.

But this statement about "subsidiary silver" is a bagatelle compared with the coining of silver under the Sherman Act for a series of years. The total coinage of silver dollars from bullion purchased under that act from August 13th, 1890 (the date at which the law took effect), to July 1st last, has been 63,748,477 pieces, containing 53,172,650 ounces of fine silver, costing $51,532,154, giving a seigniorage of $17,216,322, not a bad profit on the coining. The net imports of gold were $44,609,841, as against $78,904.612 net export for the previous fiscal year. The net exports of silver were $32,636,835, as against $33,262,258, for the fiscal year 1896.

STOCKS IN MONTREAL.

MONTREAL, Oct. 27th, 1897.

STOCKS.	Highest.	Lowest.	Total.	Closing Prices. Sellers.	Buyers.	Average price same date 1896.
Montreal	240½	239	76	245	238	225½
Ontario............	100	100	17	100	97½	79
Molsons...........	197	197	40	205	195	177½
Toronto	....	....	....	230	227	227
Merchants	185	184	7	187½	188¼	170½
Commerce	....	....	....	138	135	126
Union	....	....	....	....	108	100
M. Teleg........	175	175	1	177½	175	164
Rich. & Ont	110½	107½	2036	109	106	80
Mont. St. Ry ...	225½	224½	4719	225	224¾	214¾
do new stock	224	222½	400	224	223	....
Gas	187	185	2055	186½	185¾	177¾
C. Pacific Ry ...	82½	78½	6601	78⅝	78⅜	57½
Ld. Grant bnds.	....	....	....	....	109	107
N.W. Land pfd.	...	....	....	54	50	....
Bell Tele........	173	172½	64	177½	172½	156
Mont. 4% stock	....	....	....	....	....	....

Commercial.

TORONTO MARKETS.

TORONTO, Oct. 28th, 1897.

DAIRY PRODUCTS.—Good dairy butter is scarce, and finds ready sale upon arrival, merchants quoting 16 to 16½c. Medium to low qualities are more abundant, and slow of sale at even the lowest prices. Creamery butter is more plentiful, and the tone of the market is easier at 19 to 20c. per lb. for prints, and about 18 to 19c. for tubs. The export trade is somewhat weaker. Cheese is lifeless. Large quantities are held in the country, and some dealers predict a break in the market soon. A steady market exists for eggs. Offerings are free. The quality of held stock is not satisfactory. We quote: fresh, 15 to 16c.; held, 13 to 14c.; limed, 13 to 13½c.

FLOUR AND MEAL.—Activity characterizes the trade in flour, both by way of export and import trade. Shipments are going forward principally to the United Kingdom, and mainly to these ports; Liverpool, Belfast, London, Glasgow and Leith. The local trade is active. A fair movement to the Maritime Provinces is reported, but values in this market are lower than in the British centres, and merchants are shipping with the idea of retaining trade connection. From Newfoundland reports of new vigor in trade are received, and a fairly active trade is taking place with that island. In the United States, Minneapolis mills are reporting an extraordinary demand for flour, and have actually been forced to buy that commodity from outside mills. One company, which controls five mills with a daily capacity of 14,000 barrels, is said to be unable to supply their own demand, the first time in two or three years that the company has been forced to buy its own product.

GRAIN.—Wheat is up 2 to 3c. per bush., as compared with quotations last week. Values are firm at the advance. Deliveries are being made freely by farmers, although the recent rains had the effect of increasing the attention paid to fall ploughing, and for a few days receipts diminished somewhat. The roads are, as a rule, in excellent condition. Peas are steady and unchanged. Barley remains dull, with prices nominal. A dull and unsatisfactory market exists in buckwheat. Rye is firm in value, and active. There is only a moderate movement in corn. The New York *Journal and Bulletin*, October 27th, says: "Stocks in Europe are still small, as a rule, notwithstanding recent heavy arrivals, which were expected to depress those markets more than they did, even with pretty free marketing of native wheats on the other side, especially in France, in expectation that the Government will grant the petition of the Municipal Council of Paris to reduce the duty on wheat. Hungary and Austria are still taking wheat and rye in our markets to supply the deficit, which is increasing on later estimates, which seems like shipping coal to Newcastle thus to be compelled to supply one of our former competitors for the import trade of Western Europe. But that it should draw its deficit from America instead of from Russia argues ominously for a shorter crop in that country than has been believed."

The stocks in store at Port Arthur on Oct. 16th were 1,112,195 bushels, and there were received 820,108 bushels, and shipped 659,095 bushels, leaving in store on Oct. 23rd, 1,261,196 bushels.

GROCERIES.—Trade is moderately active. Dried fruits appear to be the chief attraction. Advices from Smyrna state that the fig market there is very firm. Many of the large packing houses have shut down, owing to rains and the high prices for fine quality figs. The crop of new Naples walnuts is reported to be smaller than the average of recent years, but of very satisfactory quality. The sugar selling arrangements are still a subject of debate, and the trade is in a state of transition. It is impossible to predict what will be the outcome of present difficulties. The world's visible supply of raw sugar was 1,090,000 tons, against 1,100,000 tons last week. For canned goods there is moderate enquiry; all offers at anything less than standard quotations are promptly closed.

HIDES AND SKINS.—The hide market remains in a most unsatisfactory condition. Merchants are paying 9c. for green cowhides, and 9½c. for steers; cured are quoted at the same prices. How long this stupidity is to last no one knows. As all the trade knows, the high prices paid to butchers are the result of competition between two firms, brought about by family complications, and until this is settled, hide merchants are called upon to do business without a profit. Sheepskins are worth 90c.; calfskins are unchanged. A Chicago advice, Oct. 26th, says: "Tone of the market fairly firm; business fairly active, although no large trade reported. Recent purchases made by tanners cleaned the market of all native steers hides offering, and prices paid were 11 to 11½c. The close was firm, with native steers at 11 to 11½c.; heavy Texas, at 10½c.; butt brands, at 10c; branded cows, at 9½c.; Colorados, at 9c.; heavy native cows, at 10 to 10½c., and light do., at 10¼ to 10½c."

LEATHER.—The market is quiet. Tanners and merchants report orders from shoe manufacturers as few and small Those who are handling specialties suited to other industries find a moderate market for their stock.

PROVISIONS.—The feeling in provision circles is somewhat easier this week. Prices, in sympathy with the hog market, are lower. The receipts of dressed hogs have been free, especially in rail shipments. For light weights $5.90 is quoted, and for heavy $5.50 per cwt. Buyers of provisions appear to be waiting for a drop in values, and are keeping away from the market. A considerable trade is doing in heavy meats, long clear bacon, and barrel pork. The falling off in trade has been most noticeable in smoked meats.

MONTREAL MARKETS.

MONTREAL, Oct. 27th, 1897.

ASHES.—The market is particularly dull. We have not heard of any export shipments for a fortnight, and there are few ashes coming in. Quotations are more or less nominal, at $3.90 for first quality of pots, seconds $3 30, and pearls $4.40 per cental.

CEMENTS AND FIREBRICKS.—Receipts of cements for the week are small, only 2,200 brls. of English, but two steamships on the way up the river are understood to have considerable supplies of Belgian. A pretty steady business is being done at the firmer prices, namely, $2.10 to 2.20 for English, and $1 90 to $2 for Belgian. A 1,000 brl. lot of the latter sold at $1,85 since last report. Of firebricks the receipts for the week are 70,000, and prices continue at from $16 to $21, as to brand.

DAIRY PRODUCTS.—Cheese exports last week were unusually heavy, totalling 121,618 boxes, as against 63,456 for corresponding week of last year. From New York the shipments of cheese last week were only 11,392 boxes. The market continues to show decline, and is weaker to the extent of about a quarter of a cent since last report. Finest Western is now quoted at 8½ to 8¾c.; Townships, about 8½c.; Quebec, 8⅛ to 8¼c. In butter there is little activity, buyers and sellers being much apart in their ideas, but values are decidedly easier.