

ditions, we are of the opinion that the mercantile and metal exchanges do actual harm to producers and consumers, and that their charters should be repealed.'

Remarkable pegging activity is reported from the West Rand. 8000 claims have been pegged since September.

Up to June 1 three drills had withdrawn from the public competition now in progress.

The Rooiberg tin mines started milling on May 31.

Of the 7,734 Chinese in the Transvaal on April 30, seven died during May and ten were removed, leaving 7,717 in the country on May 31st.

The Transvaal Government has appointed a Commission to inquire into and report upon the question as to whether any portion of the moneys accruing to the Crown from the leasing and disposal of rights of mining in Crown lands, etc., should be paid to any class of persons, and if so, to what class or classes, and in what proportion.

COMPANY NOTES

Directors of La Rose Consolidated Mines declare the quarterly dividend of three per cent., along with a bonus of one per cent.

Total production, June 1st, 1908, to May 31st, 1909, one year:

Shipments.	Tons.	Ounces Silver.	Net Value at Mine.
June-December, 1908 ...	325,777	1,498,592	\$671,286
January, 1909	58,145	291,349	132,597
February, 1909	50,280	220,938	99,237
March, 1909	49,281	131,345	55,187
April, 1909	64,984	309,944	137,128
May, 1909	56,956	496,004	226,043
Total shipments	6,054.25	2,921,174	\$1,321,480
On hand May 31, 1909...	1,109.19	89,656	42,891
Total production	6,164.44	3,010,831	\$1,364,372
Sundry income (interest and ground rentals).....			1,518
			\$1,575,497
Marketing expenses		\$203,231.19	
Concentrating		6,375.20	
Operating expenses at mine.....		272,318.67	
			\$481,925
Net operating profit for one year.....			\$1,093,572
Construction accounts			23,574

A number of cities and towns in the United States may obtain their light, heat and power direct from peat bogs in the near future. The statement is made by Federal experts that millions of dollars worth of fuel lies undeveloped in the swamps and bogs of the country, awaiting only the genius and business ability of the American before it drives the wheels of progress. Its value, on a basis of \$3.00 a ton, roughly guessed at by experts of the Geological Survey, who have been studying the peat deposits for some time, is more than thirty-eight billion dollars—more money than is represented in all the property, stock, implements and buildings owned by the farmers of the United States.

With the coal supply being used at a tremendous rate, peat is expected to become a most important auxiliary fuel and one that will prolong the life of the coal itself. An important fact which leads the experts to believe that peat will soon come into

quite general use in certain parts of the country is that it is as a rule found in quantities in regions far removed from the coal fields, so far that the cost of transporting the coal amounts to several times the cost of the fuel itself at the mines.

The states containing the greatest amount of peat are the eastern Dakotas, Minnesota, Wisconsin, Michigan, Northern Iowa, Illinois, Indiana, Ohio, New York, the New England States, New Jersey, portions of Virginia, North and South Carolina, Georgia and Florida.

A thorough investigation of the peat resources is now being undertaken by the Geological Survey, not only as to the amount of peat and its location, but also its use. Prof. Charles A. Davis, of the Technologic Branch, has general charge of the investigations, while Prof. Robert H. Fernald, consulting engineer in charge of gas producer tests, is endeavoring to find the value of peat as a fuel for heating and power purposes. The latter but recently returned from a trip to Europe where he investigated the uses of peat and found the older countries much farther advanced along this line than the United States. Professor Fernald returns with the belief that peat will soon be extensively used in the United States. In Ireland, he found that peat was being used generally for domestic purposes, but not by the manufacturing establishments. "Sweden is dotted with peat deposits and its bogs are now being extensively utilized for power purposes," says Prof. Fernald. "During the last eight years new bogs have been constantly added to the list until bogs producing from 2,000 to 5,000 tons of dry peat for power purposes per year are found on every hand. The consulting engineers who have installed some of these plants are unquestionably working in the right direction, placing the power plant directly in the peat bog and transmitting the electric current to the surrounding towns. The current is being used for manufacturing purposes and also for lighting both the streets and houses. The installation of the power plant in the bog or at the mine has been advocated in this country by the Technologic Branch of the Survey for installation of several thousand horse power only, yet this principle is applied in Sweden to small plants and may be feasible in certain parts of this country."

"Another development in the line of peat industry which promises splendid returns is the use of peat in by-product recovery gas plants. From these plants both gas for power and sulphate of ammonia can be obtained in commercially paying quantities. Both the utilization of peat for producer gas and for producer gas and for the recovery of sulphate of ammonia are perfectly feasible with American peats. Although the work done on peat at the Survey experiment plant has been limited, it has been demonstrated that gas for power can be made easily from both Florida and Massachusetts peat."

Professor Davis, who has just issued jointly with Edson A. Bastin, a bulletin on peat is optimistic on the future of peat, yet he believes the development of the industry should be accompanied by great caution.

"The operation of a gas engine at the experiment plant on peat in one or two tests has shown that this fuel is but little inferior to many grades of soft coal now on the market and superior to some in the quantity of power gas produced," says Professor Davis. "I believe the day is coming soon when cities located near the peat bogs and away from the coal fields will obtain their power and light from peat. I understand that Florida is to have a power plant soon that will use peat as fuel and will transmit the electricity to Jacksonville.

In the development of this industry, however, it must be remembered that peat contains from 85 to 90 per cent. water as it comes from the bogs. All but 15 to 20 per cent. can be dried out by exposure of the peat to the air. In burning peat in gas producers to make power gas, this peat will burn successfully with 40 per cent. moisture, which is impossible in a furnace."