

in sight, to take such an extremely optimistic view. As a matter of fact, it would be somewhat risky to double the prospects as revealed by the actual ore in sight, or, in other words, figure on the profits being maintained for eight instead of four years. Even then the shares would not be worth their par value with only the return of capital and $2\frac{1}{2}$ per cent. interest per annum reasonably assured.

This now brings us to the question of inflated stock values, and it does not require much figuring to show that the shares, when standing at a price returning only 15 per cent. on the annual profit of \$200,000, would be more than double their actual value and that, whereas, when taking the precautions referred to herein, the investment at par offers a good fighting chance, the purchasing of shares as an investment after payment of the first dividend, is very much more of a gamble, as there is then no doubt that on such an inflated valuation the mine is very much over-capitalized on the showings, even when making very liberal speculations thereon in the manner suggested. The undeniable fact that it needs to be a very good mine, indeed, which after ten years, let alone twenty years, does not at least reveal conditions necessitating a reduction in the grade of ore milled, further supports the contention that until a healthier tone is imparted to mining as an investment by adopting methods more in keeping with sound business principals, the acquirements of stock in any mining company at its inception offers better prospects of success when taking reasonable precautions such as already suggested herein.

That such should be the case clearly shows that there is something "rotten in Denmark," and in our next issue we will attempt to demonstrate that mining, which at best can now only be considered in the light of a speculation, can be made more of an investment after the mine has reached the producing stage, by distributing the surplus over revenue expenditure (now erroneously called profit) in such a manner as to keep the shares at their true value.

(To be Continued.)

MACHINERY NOTES

Model New Plant of H. W. Johns Manville Co.

The completion of the new plant of the H. W. Johns-Manville Co., at Manville, N.J., marks another important chapter in the history of this concern.

Beginning with the consolidation of the H. W. Johns-Manufacturing Co. and the Manville Covering Co., in 1901, the H. W. Johns-Manville Co. has grown by leaps and bounds until to-day it ranks as the largest concern in the world engaged in the manufacture of asbestos and magnesia products.

Branch houses are established in practically every city of prominence in the United States and Canada, and representatives in almost all foreign countries. Manufacturing plants are located in Brooklyn, N.Y.; Milwaukee, Wis.; West Milwaukee, Wis.; Hartford, Conn.; Nashua, N.H.; Lockport, N.Y.; Jersey City, N.J.; and an asphalt refinery at South Amboy, N.J. The company's asbestos mines at Danville, Province of Quebec, Canada, are the largest in existence, and produce the finest grade of asbestos.

The new Manville plant consists of nine buildings, which, together with their products, are classified as follows: A, textile and packing; B, rubber plant, electrical specialties and printing department; C, pipe coverings; D, paper mill; E, magnesia; F, roofing; G,

mastic and waterproofing; H, roofing coatings; power plant and pump house.

These buildings represent the most advanced ideas in fireproof construction, being of brick, steel and concrete, with roofs of J-M Asbestos Roofing. They are planned not only for safety, but to afford the best operating conditions for the employees. The "daylight" form of construction which is employed throughout permits a flood of light to enter the buildings through large triple-unit windows placed close together. Artificial illumination is provided in the form of J-M incandescent lamps and Frink reflectors.

The hygienic conditions of this plant are ideal. Ventilation is furnished by means of steel ventilating sash which provide a constant supply of fresh air without causing drafts. Owing to the judicious arrangement of the machinery, there is an entire absence of crowding and confusion which, in many factories, serve to hamper the operators in their work.

Each building has an average length of 1,000 feet, and is a separate factory in itself capable of being operated as an independent unit without relation to the other buildings in the group. The total combined floor area of all the buildings is about 1,000,000 square feet.

Power is furnished by the company's power plant which consists of the latest type of General Electric turbo generators, six Babcock & Wilcox high-pressure water-tube boilers aggregating 5,000 horse-power. All steam pipes are insulated with J-M Asbestos-Sponge Felted Covering in order to effect a maximum saving of fuel. The power and lighting cables, instead of being strung on overhead poles, as is generally the case in factory installations, are led underground through J-M Fibre Conduit, thereby eliminating cable trouble for all time.

The new plant is situated on a picturesque tract of 320 acres, divided by the Raritan River, in the town formerly known as Findern, N.J. The name has since been changed to "Manville." The company's private railroad system, comprising five miles of tracks, connects directly with the Central Railroad of New Jersey, the Lehigh Valley, and the Philadelphia & Reading Railroad, thereby insuring excellent shipping facilities.

About 3,000 men will be employed at this new plant, making a total of about 7,000 who are now employed by this company.

During the month of December the Elmore Vacuum plant at the Sulitelma mine, Norway, produced 650 tons of copper concentrates.

Danger signals for mines are being manufactured by the Stonehouse Enamelled Steel Mine Signal Co., of Denver. The signals are so designed as to attract immediate attention. The significance of the sign is perceived even by foreign labourers.

The Siemens Company, of Montreal, has received an order for a 5000 K.V.A., 3-phase, 60 cycle, 1800 r.p.m. turbo generator from the corporation of Edmonton. The generator is to be provided with the Siemens systems of axial ventilation so arranged that the hottest temperature in the machine can be measured. The Siemens Company has already supplied Edmonton with two generators and one induction motor.

Pile Hammers.—The McKernan-Terry Drill Co., New York, is putting on the market both heavy and light pile-hammers. To the former has recently been added