

ings covered with this material, the shower of sparks from a neighboring conflagration involves no danger. The fact that woodwork can, by its use, be made unflammable has come to be an important factor in the insurance of buildings. One of the largest branches of asbestos manufacture is that of sectional cylinders for pipe-coverings, for retaining the heat of steam and other pipes, felt protective coverings for boilers, frost-proof protections for gas or water pipes, and cement felting, which can be laid on with a trowel, for the covering of steam pipes boilers or stills. In some of these cases, where it is only necessary to retain the heat, the asbestos is mixed with other substances; but where the protection must be fire-



proof as well, only asbestos is used. The utility of such a covering is well illustrated in the heating system of railway cars. The main pipe from which the individual cars draw their respective heat supplies by side mains, if not covered with asbestos, would lose a large proportion of its caloric from the rapid motion of the car through the air. An interesting innovation in this class of manufacture is asbestos sponge. It is not generally known that sponge has great powers of fire resistance. The discovery was made accidentally not long ago, and the result was that a consignment of scraps of sponge picked up on the southern coasts was ordered for experimental purposes. The sponge was finely comminuted and mixed intimately with asbestos fibre. The combination was found so successful for any covering which had to be fire proof as well as heat proof, that the material has become standard. Being full of air cells, it necessarily makes an excellent non-conductor. Another very extensive department in asbestos manufacture is that of packings. Of these there are an infinite number of forms. In these days of high pressures and ocean records, it is of supreme importance to marine engineers that they should have jointing and packing materials on which absolute reliance can be placed. In order to meet modern exigencies every possible form of packing has been constructed, particularly with asbestos and metallic wire, and with asbestos and rubber cores for gland packing. The making of asbestos paper varies from the building up of the thickest millboard to the production of a writing-paper which, from its indestructibility, is invaluable in case of fire for preserving charters, policies, agreements, and other important documents.

To the electrical engineer asbestos is absolutely indispensable. Many parts of electrical devices and machinery and wires through which the electric current passes become heated, and were it not for the electrical insulation and heat-resisting qualities which asbestos possesses, the apparatus would be completely destroyed, particularly in the case known to electricians as "short circuiting". For such purposes it has been found advisable to combine asbestos with rubber and other gums, and this combination is now used universally for not only electrical, but also steam and mechanical purposes.

A considerable part of an asbestos factory is devoted to weaving, the asbestos being first drawn into thread for that purpose. Here again is an apparently endless diversity. There is the fire-place curtain-blower, which, with an automatic spring roller attachment, takes the place in the frame of the fireplace of the less sightly sheet-iron blower; and filtering cloths for many purposes, from straining molten metal to clarifying saccharine juices in beet root sugar refineries. A cloth is made for straining and filtering acids and alkalies in chemical laboratories. This is specially useful when the liquid to be treated is of a caustic or strongly acid nature. The filter can be thrown in the fire, and after the residual matter has been consumed, the web is as good as new. For filtering purposes generally, asbestos has a unique adaptability, and in tropical countries, it is held in grateful estimation as a cooler and purifier of water. The newest departure in the asbestos field is the construction of electrothermic apparatus. The heating effect of the electric current is utilized by embedding the wire in an asbestos sheet or pad. The pad is used by physicians and nurses for maintaining artificial heat in local applications, and is said to be already largely used in hospitals. Another application of the same principle is to car heaters. A sheet of asbestos with the embedded wires, is clamped between two thin steel plates, and the portable heater thus provided, or a series if need be, is connected to the car circuit quickly and easily. It gives an even and healthy heat and can be so regulated as not to overheat the car.

GENERAL MINING NOTES.

Nova Scotia.

The Golden Group Mining Co. are nearly ready with the plans for their new plant to be erected on the property lately owned by the Nova Scotia Gold Mines, Limited. During the month of May this group of properties produced 45 oz. of gold from 57 tons of quartz, the work being done by tribute.

The Modstock mine for the month of April produced 189 oz. 19 dwt. from 265 tons of ore.

Several properties in Goldenville, including the Springfield property, have been consolidated and a new 15-stamp mill is being erected, which, together with the 12-stamp mill on the Springfield property, will give a stamping capacity of 27 stamps. It is with pleasure that we hail increased development in this old-time district, which was the mainstay of early mining developments, and which even now has the best record in the country, although some of the best parts of it have been shut down for a considerable time.

Mr. Damas Touquoy has returned from France and will continue working his property in Caribou.

The Thompson Hill mine at Cow Bay yielded 91 oz. 8 dwt. from 50 tons of quartz during the month of May. Mr. Thompson intends crushing 50 tons of picked quartz this month, and expects a yield of about 200 oz. of gold. Considering this property was only discovered last August, it is showing up exceedingly well.

The Golden Group Mining Co. are getting their new plant in order rapidly. The old stamp mill will be used for the present. A new winding engine is being erected and also a new Rand air compressor. Things at Montague are looking better than they have for a long time and we expect before long regular bricks will be coming in from that district once more.

The Richardson Gold Mining Co. produced 493 oz. for May and June.

The North Brookfield mine produced 385 oz. from 452 tons of ore during the month of June.

The New Egerton mine produced 629 oz. from 1079 tons of quartz during April and May.

Miner T. Foster cleared up 35 oz. 9 dwt. of gold from 32½ tons of quartz. This property will probably be taken over by a strong American company who hold a bond of it.

Mr. J. E. Hardman has made a report on the Dunbrack property at North Brookfield, in the interest of Upper Canada capitalists, who have taken a two months working bond on the property.

The New Glasgow Co. produced a brick of gold weighing 137 oz. from 310 tons of quartz.

J. C. McDonald's property at Country Harbor yielded 261 oz. of gold from 215 tons of quartz.