

**Trade Catalogues.**

The H. W. Johns-Manville Co., of New York, is sending out a booklet, which describes its packing for flange joint gaskets.

Catalogue No. 7, of the Allentown Rolling Mills, of Allentown, Pa., illustrates and describes that company's well-known line of electric pumps.

Catalogue C, of the Washburn shops of the Worcester Polytechnic Institute, of Worcester, Mass., describes and illustrates the Washburn drill-grinders.

The Murray Iron Works Co., of Burlington, Ia., has prepared two folders, dealing, respectively, with the Murray Corliss engine and the Murray high-pressure boiler.

Lumber carts, trucks of all kinds, steel ore and coal cars and wheels of all kinds, made by the Archer Iron Works, of Chicago, Ill., are described in an attractive catalogue prepared by that company.

The Globe Iron Works, of Stockton, Colo., has issued a new catalogue of Truax automatic ore cars, skips, car wheels, etc. The illustrations show every detail of construction with clearness and fidelity.

The Weber Gas & Gasoline Engine Co., of Kansas City, Mo., has issued a handsome illustrated catalogue of its varied products. Many enthusiastic letters of indorsement of the company's engines are included.

'Compressed Facts about Compressed Air,' is the title of a booklet, issued by the Clayton Air-Compressor Works, of New York. It gives an outline of the points to be considered in buying an air-compressor of medium capacity.

**Industrial.**

The Isthmian Canal Commission will receive bids for 10,000 bbl. of portland cement, to be employed in the construction of the Panama canal. Communications to be addressed to the Isthmian Canal Commission, Washington, D. C.

The Duff Manufacturing Co., of Pittsburg, Pa., has received a contract for a large quantity of Barrett track jacks for the government railways of Russia. This is the third contract from this source within the year received by the Duff company, and the Barrett jacks have been adopted exclusively by the Russian government for its railroad work.

The S. H. Supply Co., of Denver, is furnishing a large pumping plant, consisting of a large duplex station pump, sinking pump, necessary boiler capacity, water column, steam line, etc., to the Weldon Gold Copper Co. of Arizona. This company is also furnishing a complete diamond drill outfit in California and one in Idaho. This material is all from their stock of slightly-used machinery.

At the regular annual meeting of the stockholders of the Apex Equipment Co. of New York, held March 2, the following officers and directors were elected: Willard U. Taylor, president; Clifton B. Jordan, vice-president and secretary; J. Sterling Drake, treasurer and general manager. M. C. Davis, formerly general manager, is no longer employed by this company, and is not authorized to represent it in any manner whatsoever.

The Sullivan Machinery Co. of Chicago announces the establishment of a new branch office in Salt Lake City, Utah, Room 128, Keith Building. John C. Taylor, formerly of the Denver office, is man-

ager. A full line of Sullivan straight-line air compressors and rock drills with mountings, equipment and duplicate parts, will be carried in stock; and inquiries for diamond core drills, heavy hoisting engines, coal-cutting machines and quarrying machinery will receive prompt attention.

An order for four 4,000 k.w., three-phase, 60-cycle, 6,600-volt, alternating current generators, with exciters, has just been placed with the Crocker-Wheeler Co., of Ampere, N. J., by the trustees of the sanitary district of Chicago. These are to be driven by Wellman-Seaver-Morgan horizontal water wheels, and put in operation at Lockport, Ill., the western end of the Chicago Sanitary & Ship Canal. The two exciters for these machines will be water-wheel driven and of 350 k.w. capacity each at 300 r.p.m.

"There is no valuable feature of the chimney that is not possessed by the fan to at least the same, and in many cases to a more marked, degree. The very features which are most conducive to economy are those which are incidental to the use of the fan for draft production. While the recent extensive introduction of induced draft in stationary practice has done much to emphasize the advantages of this system, the general superiority of mechanical draft, properly applied, has long been recognized by those who have given careful consideration to the matter."—Extract from treatise on Mechanical Draft, published by the B. F. Sturtevant Co., Boston, Mass.

"Artificial draft," states W. S. Hutton, "can be readily adjusted to effect the combustion of different kinds of fuel at different rates of combustion. It permits efficient combustion of fuel of inferior quality, and enables a steady supply of steam to be maintained, independent of climate and weather. It enables the supply of air to be properly distributed to the fuel in the furnace to effect economical combustion. The supply of air above the fuel can be readily adjusted to effect combustion of the gases evolved by the fuel, and the supply of air below the fuel can be regulated to effect the combustion of the solid portion of the fuel, and the movement of the hot gases can be readily controlled.

The contract for the compressed air power plant, to be used in driving the second pair of trolley tunnels under the Hudson river, has been awarded to the Ingersoll-Sergeant Drill Co., which has furnished all the compressors for sub-aqueous tunnel work in New York and vicinity. These tunnels, which are popularly known as the Cortlandt street tunnels, for the reason that their New York terminal will be located on that street, are to be built by the Hudson companies, of which Chas. M. Jacobs is the chief engineer. The shield method of sub-aqueous tunneling will be used. The order includes five duplex air-compressors. Three are low-pressure class "H" machines with steam cylinders 14 and 28 in. in diameter, air cylinders 22¼ in. in diameter and 16 in. stroke, with a maximum air pressure of 50 lb. per square inch and a capacity of 1,850 cu. ft. of free air per minute each. The other two are class "HC" machines for high pressure, with steam cylinders 14 and 28 in. in diameter, air cylinders 24¾ and 14¾ in. in diameter and 16-in. stroke, with a maximum pressure of 125 lb. per square inch and a combined capacity of 2,000 cu. ft. of free air per minute. This makes 38 Ingersoll-Sergeant air-compressors, with a total capacity of 117,234 cu. ft. of free air per minute, now used in building the various tunnels under the Hudson and East rivers.

**General Mining News.****ALABAMA.**

Gold mining in Alabama is receiving considerable attention, and several Birmingham parties are now pushing development of this line in east Alabama. The Hillabee Gold Mining Co., which is controlled by T. H. Aldrich, Sr., and his son, of Birmingham, is one of the most active gold mining concerns in the Southern States. William Hood and son, also of Birmingham, are pushing work on adjacent goldfields to those of the Hillabee company, while other parties are working lands in Clay, Cleburne and adjoining counties in east Alabama. A smelting plant is needed badly. It is claimed that while the government only gave Alabama credit last year for producing \$20,000 worth of gold, that no less than \$60,000 worth was produced last year. It is figured that the production this year will be between \$75,000 and \$90,000. Much of the gold produced in this State last year was sent to smelters in Georgia and other states, the government giving those states credit for the production. The Hillabee company produced last year alone \$31,000, which is \$2,000 worth more gold than the government gives this state, according to the best information given out here. It is reported that the ores being mined now are running well, and those engaged in this development are pleased at the prospects.

State Mine Inspector J. M. Gray during the past week submitted his report to Acting Governor Cunningham on the explosion which took place in the Virginia mine, in Jefferson county. In all, 111 men lost their lives in this disaster, every man who was at work at the time of the explosion. The chief inspector expresses the belief, from all facts before him and from a personal investigation into the mines, that a windy shot was made by one of the miners in the fifth entry, left, in which too much dynamite or powder was used. This "shot" caused the dust explosion. The mine had been examined several times before, and dates are given of such examinations. The management of the mine was at times notified to make certain changes in the operation of the mine, in order to protect life and property. Accidents from time to time in the mine were investigated, and recommendations made so as to prevent recurrences. The mine was not considered gaseous. The ventilation had been improved. There was a man-way and a main slope. Improvements suggested from time to time by the inspector and his assistants were made by the company. The report of the chief inspector covers investigations made since the mine was first opened.

The damage to the Virginia mine by the explosion was not serious, and in a few weeks it is believed that repairs can be made so that a resumption of work can be had. Commencing March 21, Coroner Paris, of Jefferson county, will begin an investigation to see if there was criminal negligence in the operation of the mine. A large number of witnesses have been summoned, and it is expected that several days will be taken up in making the investigation.

**ARIZONA.****COCHISE COUNTY.**

Paradise.—At the Lewandowski group which adjoins the Savage on the southeast, S. S. Badger has completed an exhaustive report on the property, and Mr. Lewandowski, the owner, who is now in