

gether with a set of rules for the guidance of those operating the Rotary, based on experience gained in handling the plow.

**Rock Drills.**—Prospectors and mining men generally will find the catalogue of the Canadian Rand Co., Montreal, Que., very interesting. It sets forth by illustration and description the "Calyx" diamondless core drill, which removes a core from the bore hole, thus showing the character of the earth's crust at the place of boring. Size, 6 x 8¾, pp. 54.

**Rotary Converters.**—Canadian Westinghouse Co., Limited, Hamilton. Circular No. 1,028 describes rotary converters, and gives views of several installations. Size, 7 x 10, pp. 24.

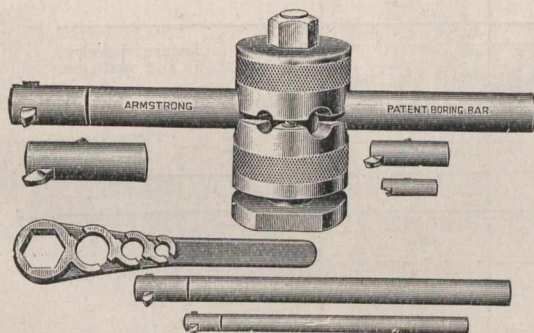
**Split Friction Clutches.**—Dodge Manufacturing Co., Toronto, Ont. In an illustrated pamphlet this company describes and gives prices of their split friction clutches and cut-off coupling: 3½ x 6¼, pp. 8.

**Sprocket and Traction Wheels.**—The Link-Belt Co., of Philadelphia, Pa., have just issued revised price lists, to take the place of pages 262-272 of their general catalogue No. 37.

**Trussed Concrete.**—A very artistic pamphlet showing the new automobile factory of the Geo. N. Pierce Co., of Buffalo, N.Y., in which the Kahn System of reinforced concrete is used, has been prepared by the Trussed Concrete Steel Co., of Detroit, Mich. The illustrations throughout are the finest. Anyone interested in concrete factory construction should secure a copy. 9½ x 12, pp. 24.

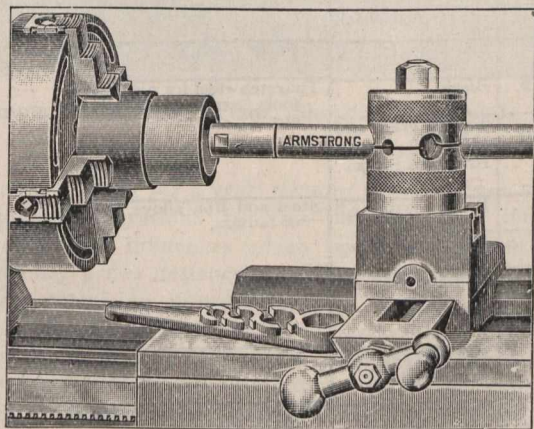
### A THREE-BAR BORING TOOL.

A very useful device is shown in the accompanying illustrations. It is a three-bar boring tool, and, as indicated by its name, is a holder equipped with three bars of different sizes. From the illustrations machinists will at once appreciate the practical advantage of this lathe attachment. A slight turn of the nut at the top of the holder shown in Fig. 1 releases or fastens both bar and



Three-Bar Boring Tool.

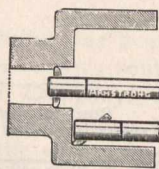
holder. It is possible to change the bars almost instantly, enabling the operator to use the stiffest bar possible for each job, and in this way speeds and feeds may be increased, and time saved.



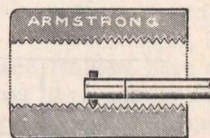
The Armstrong Three-Bar Boring Tool.

The holders are made in four sizes: 1-B with bars ½, ¾, and 1-⅞ inches diameter; 2-B 9-16, 15-16, and 1-5-16; 3-B ⅜, 1½, and 1-½; 4-B 15-16, 15-16, and 1 13-16. The bolt head and bottom part of holders are made of ample size to allow for fitting which is necessary on account of the great

variation in height of centres above slide rest and sizes of slots.



Roughing out cored hole and Angle Cutter Boring and Facing.



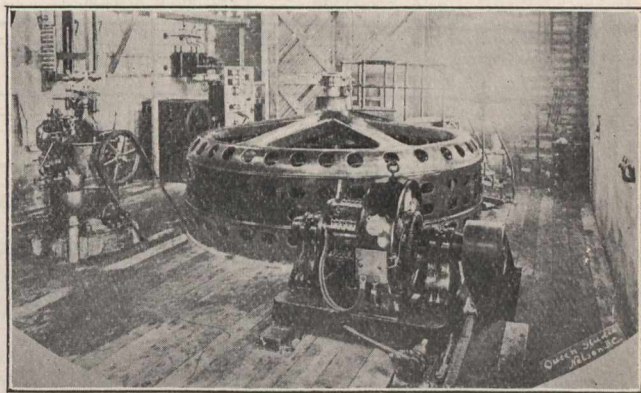
Showing Tool Cutting a Thread.

This tool, which will be found very useful in almost every machine shop, is manufactured by the Armstrong Brothers Tool Co., 104-124 N. Francisco Ave., Chicago, Ill. Each set is supplied with an Armstrong combination wrench.

### HYDRAULIC TURBINE AND GENERATOR AT NELSON, B.C.

A test run of an Allis-Chalmers hydraulic turbine generator unit was recently conducted at the city power plant of Nelson, B.C., in the presence of city officials, which resulted decidedly in favor of the apparatus. The turbine generator unit has a normal capacity of 750 k.w., but during the test run this output was increased to 1,340 k.w. for a period of over forty-five minutes continuous running without undue increase in temperature of bearings.

The usual tests were made as to the heating of the coils and bearings. According to the guarantees the armature



Generator driven by Hydraulic Turbine of 1,000 horse-power rated capacity at Nelson, B.C., developing 1,250 horse-power continuously.

and field coils did not rise in temperature above 35° centigrade.

The supply for light and power has been furnished up to the present time by the West Kootenay Power and Light Company, situated just across the Kootenay River from the new city power plant, out of which source both companies derive their power.

The hydraulic turbine, which is of standard design, was built at the Scranton, Pa., works of the Allis-Chalmers Company, and the generator, which is the vertical type, specially designed for direct connection to hydraulic turbines, was built at the electrical works of the Allis-Chalmers Company, Cincinnati, Ohio.

### A NEW JOURNAL.

Under the title "Copper and Brass" a new 32 page monthly journal is being published by the Copper and Brass Publishing Company, of Detroit, Mich. The journal is devoted to the copper, brass, bronze, and aluminum industries. Mr. R. Marshall is the editor. The first number (March, 1907) contains an interesting and valuable article by H. M. Lane, Sources of Non-Ferrous Metals. Mr. Lane purposes writing a series of articles for "Copper and Brass," of which this is the first. Other articles contained in this number are: The Copper Situation, by Paule Leake; Moulding of Odd Castings, and Aluminum in Typewriters.