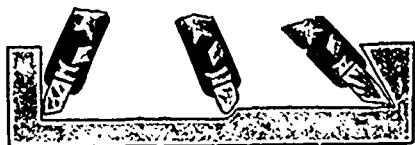


elections many good speeches were made, tending to emphasize the fact that the objects of the association were mutual benefit and improvement, not what is understood as labor organization in any form.

INTERESTING TO LATHE OWNERS.

A practical substitute, of self-hardening steel, for forged tools for general lathe and planer work, especially adapted for economical use, is shown in the accompanying cuts. These tools possess, the makers claim, all the good points of a forged



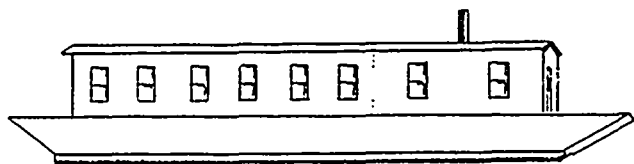
tool, and are made in variety of sizes in straight right and left hand offset, and in the form of a boring bar. The makers claim a saving of 90 per cent. tool steel, that is, one pound of steel used in a holder will do the work of 10 lbs. used in the old way, and also a saving of 70 per cent. in grinding. The Goldie-McCulloch Co., McClary Mfg. Co., Toronto Electric Motor



Co., Bertram & Sons, J. J. Stevens, and many other leading Canadian manufacturers, have adopted these tool holders. Further information can be obtained from the Aikenhead Hardware Co., Toronto.

AN OTTAWA RIVER HOUSE BOAT.

Bannerman & Findlater, manufacturers of boilers, etc., Ottawa, who recently moved into their new premises, which were rebuilt on a larger scale after the fire of last year, have recently turned out an interesting job in the shape of four lumbermen's "house boats," for the Upper Ottawa Improvement Co. These are the first iron house boats built in Canada, two of them being for use at Quio (Chats Lake), and two on the Ottawa, at Pembroke. These boats—a diagram of which is given herewith—are scow-shaped, each 51½ feet long over all, with a keel of about 42 feet; 12 feet wide at the top, and 11 feet



across the bottom and 3 feet deep. The bow tapers to an extent of about 6 feet, and the stern 4 feet. The keel is formed of a piece of timber 7 inches deep and 6 inches wide, and is protected by an iron shoe. The house stands 6 feet above the top of the hull, making a height of ceiling of about 9 feet. The kitchen and cabin occupies about one-third of the house, the rest being occupied by sleeping berths, of which there are two tiers, a tier on each side of the boat with a gangway through the middle, making accommodation for a crew of twenty-four. The house is clap-boarded with an iron roof.

NEW PLANT FOR THE WAR EAGLE MINES.

The War Eagle Cons. Mining & Dev. Co., of Rossland, B.C., have just closed a contract with the James Cooper Mfg. Co., Limited, Montreal, for a Duplex Ingersoll-Sergeant Air Compressor, and a 300 horse power Electric Hoisting Engine. The compressor is a Duplex machine of the latest type having two 24¼" by 48" air cylinders, and is ample at normal speed to furnish sufficient air for 50 drills. It will be operated by a 500 horse power motor, and in place of belting, 22 cotton ropes will be used to drive the machine. As an evidence of the size of this machine, it may be stated that the fly wheel is 20 feet in diameter and will weigh, when finished, about 25 tons. Mr. Mills, the Consulting Mechanical Engineer for Mr. Gooderham, after an extended tour through the mining districts of Montana, California and British Columbia, and after making

exhaustive tests of the efficiency of the various types of compressors, decided to adopt the piston inlet type of machine as being the most economical. The hoisting engine, which is to be operated by electricity, is of 300 horse power, and has double drums arranged for two-compartment shaft, and is capable of hoisting from a depth of 3,000 feet, the normal working load being 8 tons, and the speed 1,000 ft. per minute. The motor for the hoisting engine is of the induction type, and can work up to 600 h.p. It is reversible and can run at any speed up to synchronism. Not only will the compressor be the largest machine ever built in Canada, but both the compressor and hoisting engine will be the largest machines on this continent operated by electricity, and it speaks well for the enterprise of Rossland mines, that they are foremost in the field of up-to-date machinery. The motor for the compressor is a 400 h.p. synchronous machine and will run at 200 revolutions per minute. The electrical equipment is being furnished by the Canadian General Electric Co., of Peterboro, Ont., and the machinery when completed will aggregate about 15 carloads. The plant is to be delivered on cars in ten weeks from receipt of order, and should be on the ground inside of three months. The power will be derived from the works of the West Kootenay Power Co. The War Eagle mine has now been proved to a depth of 625 feet, giving an estimated amount of ore in sight of \$3,500,000. In one place the vein is exposed to a width of 50 feet, giving an average assay of \$25. The force of miners is to be increased to 50 men.

CANADIAN ELECTRICAL ASSOCIATION.

At the last meeting of the Executive Committee of the Canadian Electrical Association, it was decided to hold the convention on Tuesday, Wednesday and Thursday, the 28th, 29th and 30th of June, in Montreal. The headquarters of the association during the convention will be at the Windsor Hotel, where the business sessions and the annual banquet will be held. The draft programme, recommended by the local committee of arrangements, with some slight amendments, was adopted, and is as follows:

First Day.—Executive meeting 9.30 to 10 a.m.; session, 10 a.m. to 1 p.m.; session 2 to 5 p.m.; 7.30 p.m., trip round Mount Royal by special Park and Island cars, afterwards ascending Incline railway, to lookout on mountain to view the city under illumination.

Second Day.—Session, 9 to 12, noon; cabs and busses from Windsor Hotel at 1 p.m. to visit: (1) Bell Telephone Company's new building; (2) Street Railway Company's power house; (3) power house and works of the Lachine Rapids Hydraulic & Land Co., returning to city at 7.30 p.m.; 9 p.m. annual banquet of Association at Windsor Hotel.

Third Day.—Session, 9 to 12 a.m., election of officers and visit to McGill University; 1.30 p.m., visit to Royal Electric Company's lighting station and factory, then by special G.T. train to visit the works of the Chambly Manufacturing Company at Chambly.

A number of very interesting and instructive papers relating to various phases of electrical work have been promised and are in course of preparation. Negotiations are in progress with the object of securing special transportation rates to enable a large number of the western members to participate in the proceedings of what will undoubtedly be a very pleasurable and instructive occasion.

THE E. & D. WHEEL.

The factory of the Canadian Typograph Co., manufacturers of the celebrated "E. & D." bicycle, is pushed to its full capacity. The Globe, in a recent notice of this wheel, says: "The bearings of this bicycle were invented in Canada in 1895, by Canadians, and the wheel is built only in Canada and exported throughout the world. It is the first and only Canadian bicycle that has successfully entered the United States market, and Canadians have a particular reason for feeling proud when it is known that this wheel commands a higher price than any wheel in the United States, and that it is sold there at an advance of from \$15 to \$20 above its price in Canada. Perfection of movement has always been the particular theme of this company, and they have every reason to feel proud of the reputation they have gained in so short a time by their wonderful hub. We are in-