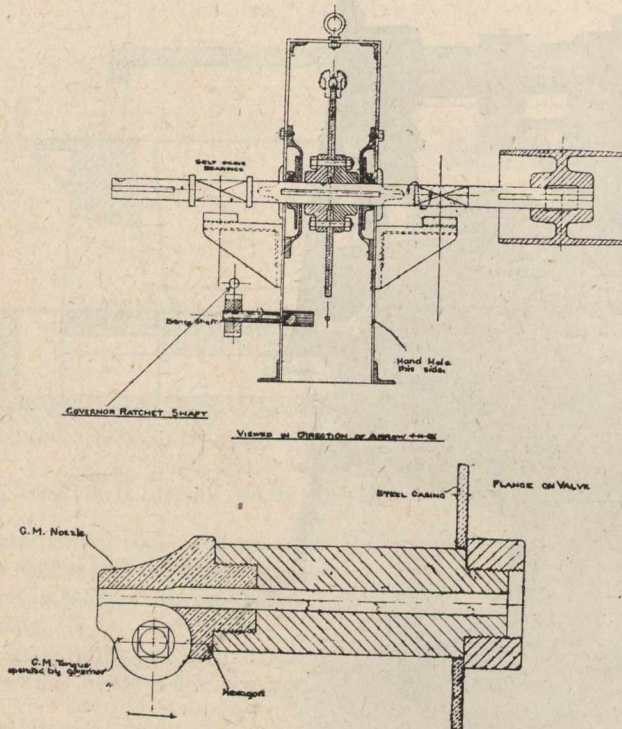


TANGENTIAL WATER WHEELS.

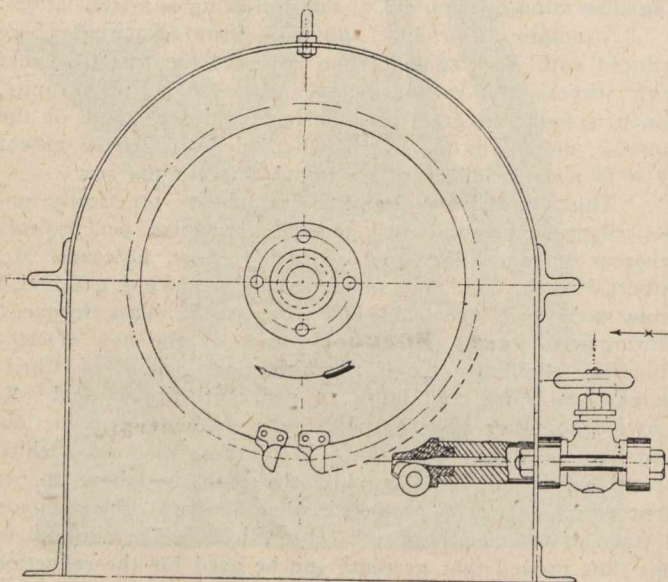
Tangential water wheels may be used wherever power is required, and in any place where water under high pressure can be secured. The drawings reproduced to illustrate this article, show one of the latest high pressure water wheels manufactured by Mr. Percy Pitman, of Crophorne, Pershore, England.

This wheel is operating on one of the high pressure water mains of a water supply company.

It is 30 inches in diameter and has a speed of 1,000



R. P. M. under 700 pounds pressure per square inch (1,614 ft. head), and develops any power up to 25 B. H. P. as desired. It is fitted with improved rectangular regulating nozzle with operating tongue, which is connected to the governor mechanism, and gives very close speed regulation for driving electric lighting plants, etc. Speed regulation to within 2 to 3 per cent. under changes of load has been obtained under ordinary working conditions. The buckets and nozzles are of phosphor bronze, accurately machined to a fit. The nozzle gives a solid and transparent jet of water, at all stages of opening, and is entirely free from spray.



It is fitted with high speed governor, as shown; also a $\frac{3}{4}$ -inch diameter high pressure stop valve, and hand regulating mechanism. This governor can be cut out instantly if it is desired to regulate by hand.

These machines are made for pressures from 700 to 1,050 pounds per square inch, and in sizes from $\frac{1}{8}$ to 50 horse-

power. They may be used for driving lathes, dynamos, ventilating fans, coffee mills and roasters, cream separators, potato peelers, churns, sausage machines, bottle washers, hair-dressers' brushes, sewing machines, paint mills, shop window attractions, hay choppers, and cartridge machinery.

IRRIGATION IN THE WEST.

The first irrigation convention ever held in the West will be opened in Calgary on July 17th. A most interesting programme has been prepared, and resolutions and papers on the following subjects will be submitted:

Forestry as applied to irrigation.

Extension of surveys in connection with irrigation, having particular reference to gauging of streams and location of reservoir sites.

Agricultural and horticultural experiments and the use and duty of water on the irrigated farms.

The industrial development following the wake of irrigation.

Laws relating to the use of water and the administration thereof.

(a) In British Columbia.

(b) In Alberta and Saskatchewan.

Social phase of the irrigation movement.

The co-operation of irrigation and drainage.

Status of irrigation in Canada.

Permanent organization.

An effort is also being made to induce the following gentlemen to address the convention:

Prof. L. G. Carpenter, director and professor of irrigation, Colorado Agricultural College, Fort Collins, Colorado.

Prof. F. W. Newell, director reclamation branch, United States Department of the Interior, Washington, D.C.

Hon. George Day, Blakley, Cassia County, Idaho.

Mr. John Widstoe, Superintendent State Agricultural College, Logan, Utah.

Prof. B. C. Buffum, director Experimental Station, Larimer, Wyoming.

Full information may be obtained from Mr. C. W. Peterson, Chairman of Committee on Arrangements, Calgary, Alta.

OBITUARY.

John A. Walker, vice-president and treasurer of the Joseph Dixon Crucible Company, died at his home, Jersey City, N. J., on May 23rd.

Charles C. Malloch, C.E., of Ottawa, was drowned at Mills Isles Rapids, June 1st, while with the Georgian Bay Canal staff taking hydraulic measurements at the pitch of the rapids.

CONTRACTS AWARDED.

Manitoba.

Mr. W. F. Lee has received the contract from the City of Winnipeg to supply from 15,000 to 30,000 barrels of "Sampson" cement at 78 $\frac{1}{4}$ cent per 100 lbs.

The May-Sharpe Construction Co., Winnipeg, have secured the contract for the erection of the Roblin Hall, in connection with the Manitoba Agricultural College. Messrs Hooper & Walker, McIntyre Block, Winnipeg, are the architects. Price, \$106,000.

British Columbia.

It is understood that the firm of Ironsides, Rannie & Campbell have secured the contract for the construction of the Eburne-New Westminster railway line, and that according to the terms of the contract the work must be completed by end of the year.

Ontario.

The contract for the new bridge and dam at Buckhorn has been let to D. Conroy, of Peterborough. The contract price is \$56,000.

EDUCATIONAL.

A circular that those who anticipate taking a course in railway theory and practice has been received from McGill University, Montreal. It is a prospectus of the McGill Railroading Course for 1907-08. This is a subject that is made a specialty of in the Montreal Institution of learning. Detailed information may be had from Mr. J. A. Nicholson, M.A., Registrar, or Professor Clarence Morgan, McGill College, Montreal, Que.