

**Improved Water-wheel Governor.**

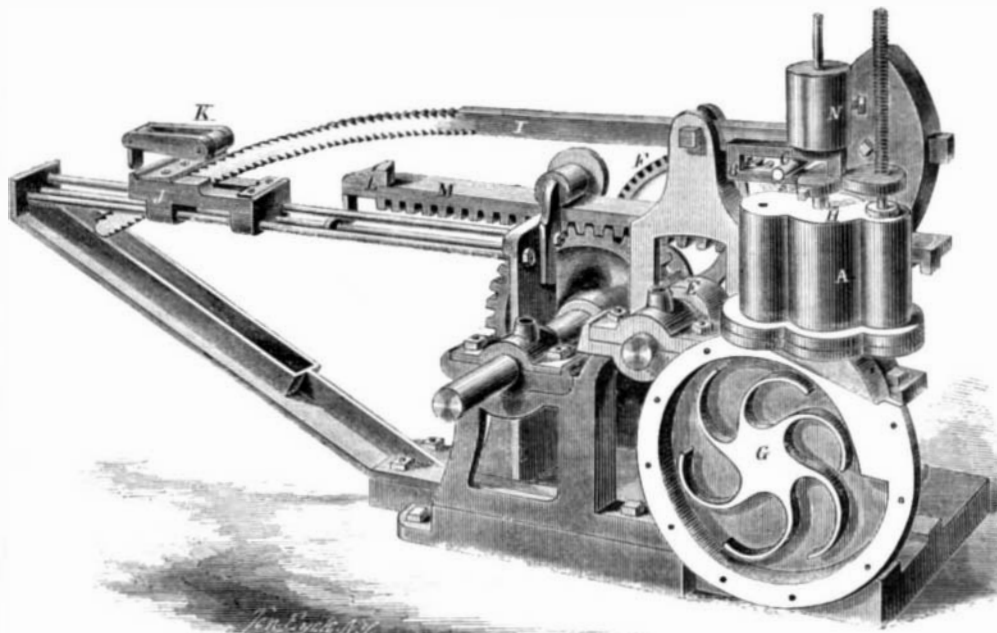
This machine is designed to regulate the quantity of water admitted to water-wheels of any description, and thereby cause them to run at a steady velocity. The principle involved in this machine is that of a piston resting on a column of liquid—oil by preference—said column being supplied continually by a centrifugal pump working directly below the piston. In the engraving the oil cylinder is A, and the piston rod has a slotted yoke, B, which the pin, C, of the vibrating lever works in. This lever vibrates on a center by the action of the eccentric, E, which, in turn, is driven by gears, F. The fan, G, in the pump raises the oil to the piston above through suitable openings in the pump chamber, and the oil is continually supplied to the fan through other openings not shown.

When the fan is driven at a certain velocity by a belt or gears, the piston on the rod, H, stands at a fixed point, and the bar, I, which has ratchet teeth cut on one end, pushes the carriage, J, out to a stated point on the slides. The catch, K, hooks over the stud, L, on the rack, M, which is in direct communication with the gate of the penstock, so that as the bar, I, works, it advances or moves back the carriage, J, thus completely controlling the velocity of the water-wheel to which the apparatus is attached. When the catch, K, is thrown back, as in the engraving, the gate is disconnected from the governor, one revolution of which will completely open or shut the gate. An advantage in this machine is, that it is always in gear to shut the gate, so that if the latch is not dropped, through carelessness, the wheel can never run too fast. The inventor states that it will run the gate from wide open to shut close, in six seconds. The velocity of the wheel, for a certain speed, is regulated by applying weights, N, to the cross-head so as to increase the resistance to the piston. Many of these governors are now in use, and have been giving great satisfaction for two and a half years. Governors for steam engines are also made on the same principle. Patented by J. E. Gillespie on the 7th of January, 1862. For further information address the agents, Messrs. Oliver Brothers & Co., 45 Liberty street, New York.

**Oil-stone Fountain.**

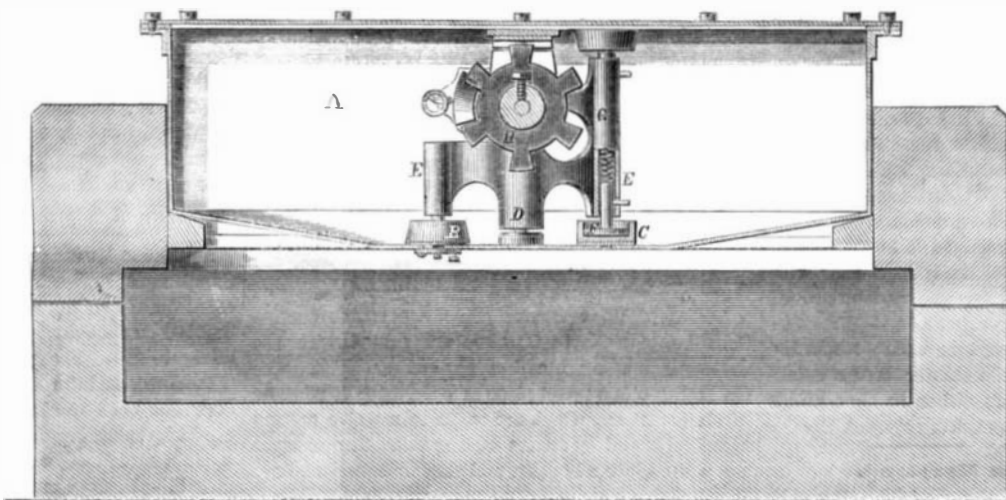
This convenient article is one that will supply an existing want, which is to have the oil always at hand so that it can be used immediately on oil stones. By the use of it, also, the exact quantity of oil required is dropped on the stone, so that the surface of the latter is kept clean and free from gum, for if just as much as is required is put on the stone, it will be all used and no waste will occur. This fountain is constructed as follows:—The metallic fountain, A, is set in the top of the oil-stone box within a short distance of the stone. In the bottom of the fountain there are two apertures covered by cork-faced valves, B and C. These valves are attached to the casting, D, which is in one piece, and has the arm, E counter-bored to let a spring play in them. These

springs keep the valves tight against the bottom of the fountain, through the agency of the plungers, F. The arm, G, on the casting, D, has its upper end extended so as to form another valve similar to those below. This valve covers an aperture for the admission of oil to the fountain; but there must be another hole in the top, in addition, to let the air in the fountain out, as the oil is poured in. By the action of the wheel, H, the arms of which are cam-shaped on the back, and strike similar cam faces on the casting, D, the valves are moved away from the openings beneath them, and quickly closed again by a spring (not shown) attached to the casting, D. The wheel, H, is on a shaft which runs through the

**GILLESPIE'S WATER-WHEEL GOVERNOR.**

box; it has a milled head on the outside to be turned by the thumb and finger. This operation lets one drop of oil issue from each valve at the bottom at a time, so that the quantity is very perfectly regulated. Thick and heavy oils can be used in this fountain, for it can be set on the stove and heated without injury. The several parts of this mechanism are quite simple and few in number. When properly made they will not get out of order in a long time. This oil stone will no doubt command a ready sale among wood-workers.

It was patented through the Scientific Amer-

**FUNK'S OIL-STONE FOUNTAIN.**

ican Patent Agency on the 19th of April, 1864, by James Funk, of Beverly, Ill. For further information address the inventor as above. [See advertisement on another page.]

The new 10-cent postal currency will be printed on paper made of corn husks.

**A NEW SCIENTIFIC SOCIETY.**

A movement is on foot for the establishment, in this city, of a new scientific association, which, if properly managed, may exert a great, beneficent and long-enduring influence. A meeting for organization was held at room 24 of the Cooper Institute, on Tuesday evening, November 29th. Dr. John H. Griscom was chosen chairman, and a committee was appointed to draft a constitution with instructions to report on Tuesday, Dec. 6th.

Abraham Hewett, Esq., stated that, by the terms of the trust deed of Peter Cooper, conveying the building in which the meeting was assembled to the

Trustees of the Cooper Union, provision was made for the formation of such a society, requiring that the large hall of the Cooper Institute should be appropriated one evening in every week, free of charge, for its meetings. Mr. Hewett, on the part of the Trustees, invited the gentlemen present to organize under that provision. The committee on organization were accordingly instructed to confer with the Trustees of the Cooper Union.

The meeting was in some respects very promising, and in others very unpromising. The room was nearly filled, the appearance of the men was remarkably intelligent, several who addressed the meeting are admirable speakers, and certainly no more dignified, courteous, intelligent and in all respects able, presiding officer could be found than Dr. Griscom. If he

can manage to obtain the earnest co-operation of men like himself, of learning and character, the meetings will be largely attended, and the society will command the respect of the community and will exert a very powerful influence.

But among the active promoters of the new organization were several men who are far more fond of hearing their own sweet voices than they are of interesting the people to whom they are talking. By their long-winded papers and speeches before the Farmers' Club and Polytechnic Association, they have made themselves such insufferable bores to those

societies that the members refuse to listen to them, or listen with extreme impatience. They occupied a large share of the time on Tuesday evening; one of them introduced his dry hobby, "meteorology," and another craved the courtesy of the audience for time to "pitch into the mathematicians." Unless some device can be found for putting a bridle upon the tongues of these men, the meetings of the new society will make a sorry appearance in the great hall of the Cooper Institute.

**A REMARKABLE OIL STRIKE.**—We understand that Messrs. Pennock, Ball & Co., of this city, who,

for several months past, have been sinking a well on Buck Run, not far from Zanesville, Ohio, are now obtaining one hundred and sixty barrels of oil a day. Its specific gravity is said to be thirty, and is selling at twenty-four dollars per barrel at the well. This is one of the most remarkable strikes in the history of oil.—*Pittsburgh Commercial.*