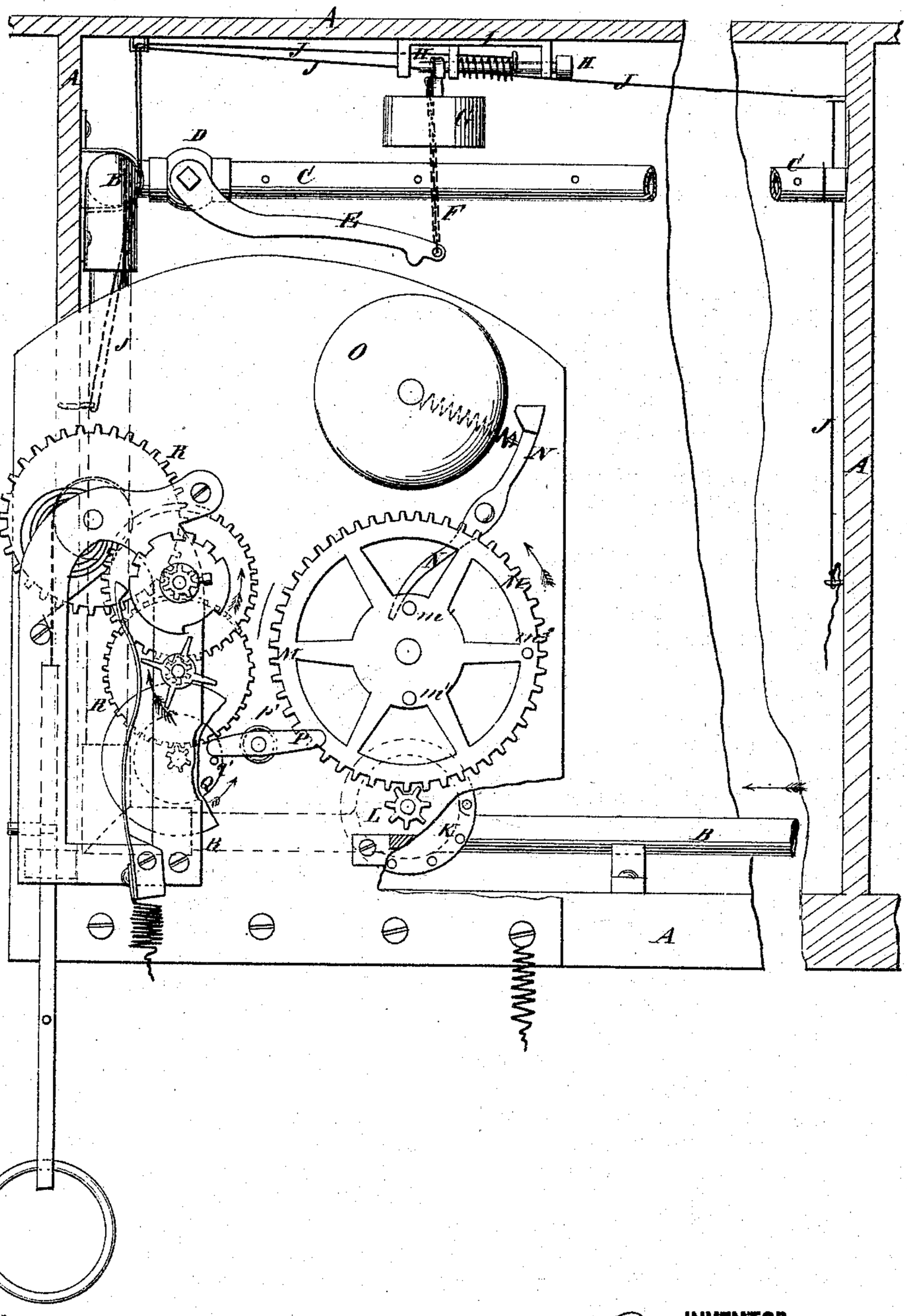
T. F. NEVINS & J. W. SMITH.

COMBINED ELECTRIC FIRE SIGNAL APPARATUS AND FIRE EXTINGUISHERS.

No. 182,219. Patented Sept. 12, 1876.



WITNESSES:

A. W. Abrequez

John Goetzals

INVENTOR:

T. F. Nevins

By J. W. Smith

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS F. NEVINS AND JOHN W. SMITH, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN COMBINED ELECTRIC FIRE-SIGNAL APPARATUS AND FIRE-EXTINGUISHER.

Specification forming part of Letters Patent No. **182,219**, dated September 12, 1876; application filed June 12, 1876.

To all whom it may concern:

Be it known that we, THOMAS F. NEVINS and JOHN W. SMITH, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Fire-Alarms, of which the following is a specification:

The figure is a front view of our improved apparatus, parts being broken away to show the construction.

The object of this invention is to connect an automatic fire-extinguisher with a telegraph-alarm in such a way that the alarm may be sounded as soon as the extinguisher begins to operate.

The invention consists in the combination of the wheel provided with the pins, the pivoted trip-bar, and the wheel provided with a pin, with the shaft of a water-wheel placed in the water-pipe of an automatic fire-extinguishing apparatus, with the hammer of a bell, and with the gearing of an ordinary telegraph-alarm, as hereinafter fully described.

A represents a building; B, the pipe through which the water is brought into the building, and with which, in the upper part of the room, is connected the perforated pipe C, through which the water is discharged into the room, and in which, near the pipe B, is placed a stop-cock, D. To the handle E of the stop-cock D is attached the end of a short chain, F, the other end of which is attached to a weight, G. The stem of the weight G is made with an eye or hook to receive a pin, H, that slides in keepers attached to the ceiling of the room. The pin H is held back by a spring, I, and is held forward by a cord, J, which is led to different parts of the room, so that should a fire occur the flame may burn off the cord J, and cause the weight to drop, which opens the cock D and causes a discharge of water into the room.

In any convenient part of the pipe B is placed a small water-wheel, K, to the shaft of which is attached a small gear-wheel, L. The teeth of the small gear-wheel L mesh into the teeth of the large gear-wheel M, which is pivoted to any convenient support, and to the side of which are attached one, two, or more pins, m^1, which strike against the hammer N of the bell O, and sound an alarm to call the attention of any one who may be in the building to the fire. To the wheel M is also attached a pin, m^2, which, as the said wheel revolves, strikes against a trip-bar, P, pivoted to some suitable support in such a position that its other end may receive a pin, q', attached to a disk or wheel, Q, secured to the shaft of one of the gear-wheels of an ordinary telegraph-alarm, R, and hold said alarm from operating. Upon the pivot of the trip-bar P is placed a spring, p', of sufficient strength to hold the bar in position when adjusted.

The apparatus is set by winding up the spring of the telegraph-alarm in the usual way, adjusting the bar P to receive the pin q' of the wheel Q, and adjusting the wheel M into such a position that the pin m^2 will trip the bar P as soon as the fire-extinguisher begins to operate.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination of the wheel M, provided with the pins m^1 m^2, the pivoted trip-bar P, and the wheel Q, provided with a pin, q', with the shaft of a water-wheel, K, placed in the water-pipe B of an automatic fire-extinguishing apparatus, with the hammer N of a bell, O, and with the gearing of an ordinary telegraph-alarm, R, substantially as herein shown and described.

THOS. F. NEVINS.
JOHN W. SMITH.

Witnesses:
E. H. SHUTES,
E. A. KOLLMYER.