

J. F. Gauweiler & Just Stengel's Fire Alarm.

74339

PATENTED

Fig. 1. FEB 11 1868

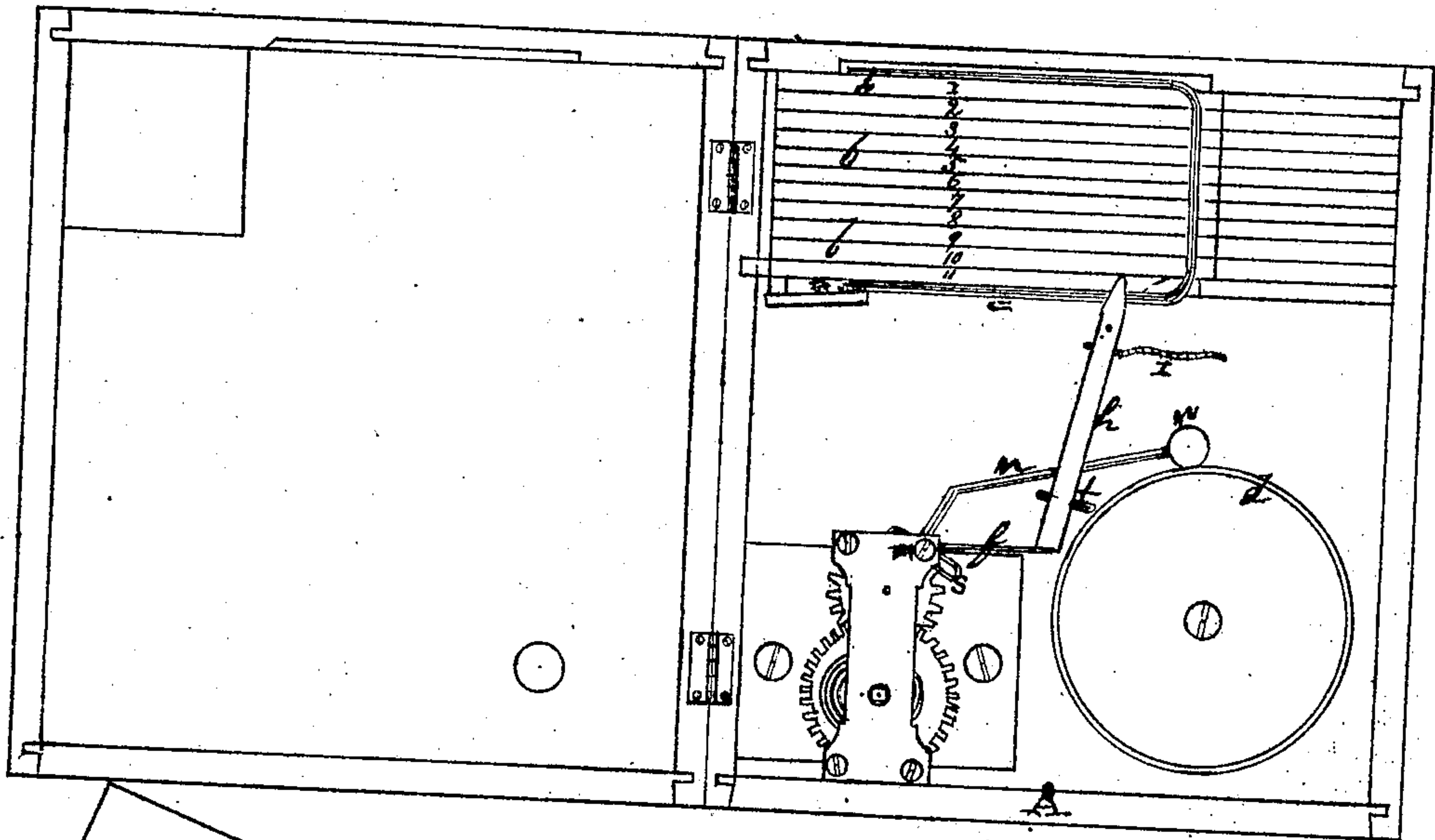


Fig. 2

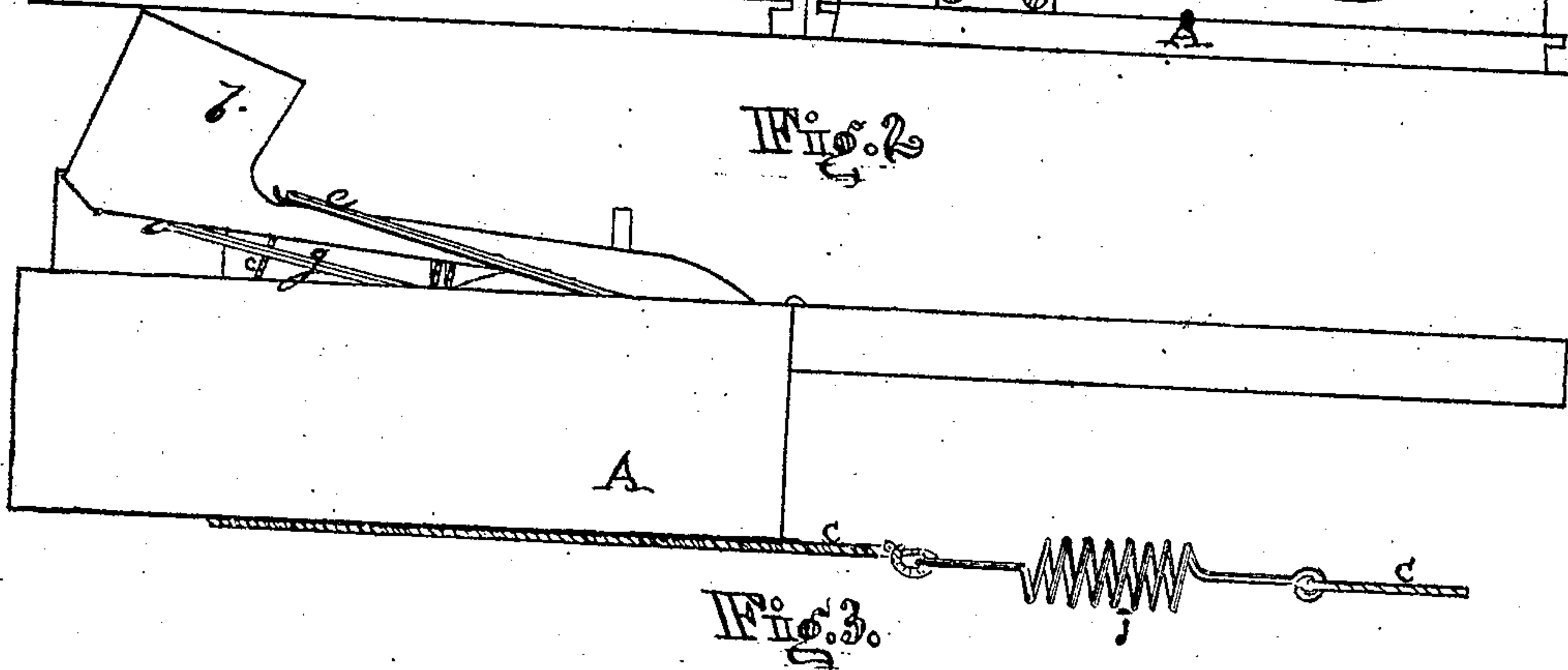
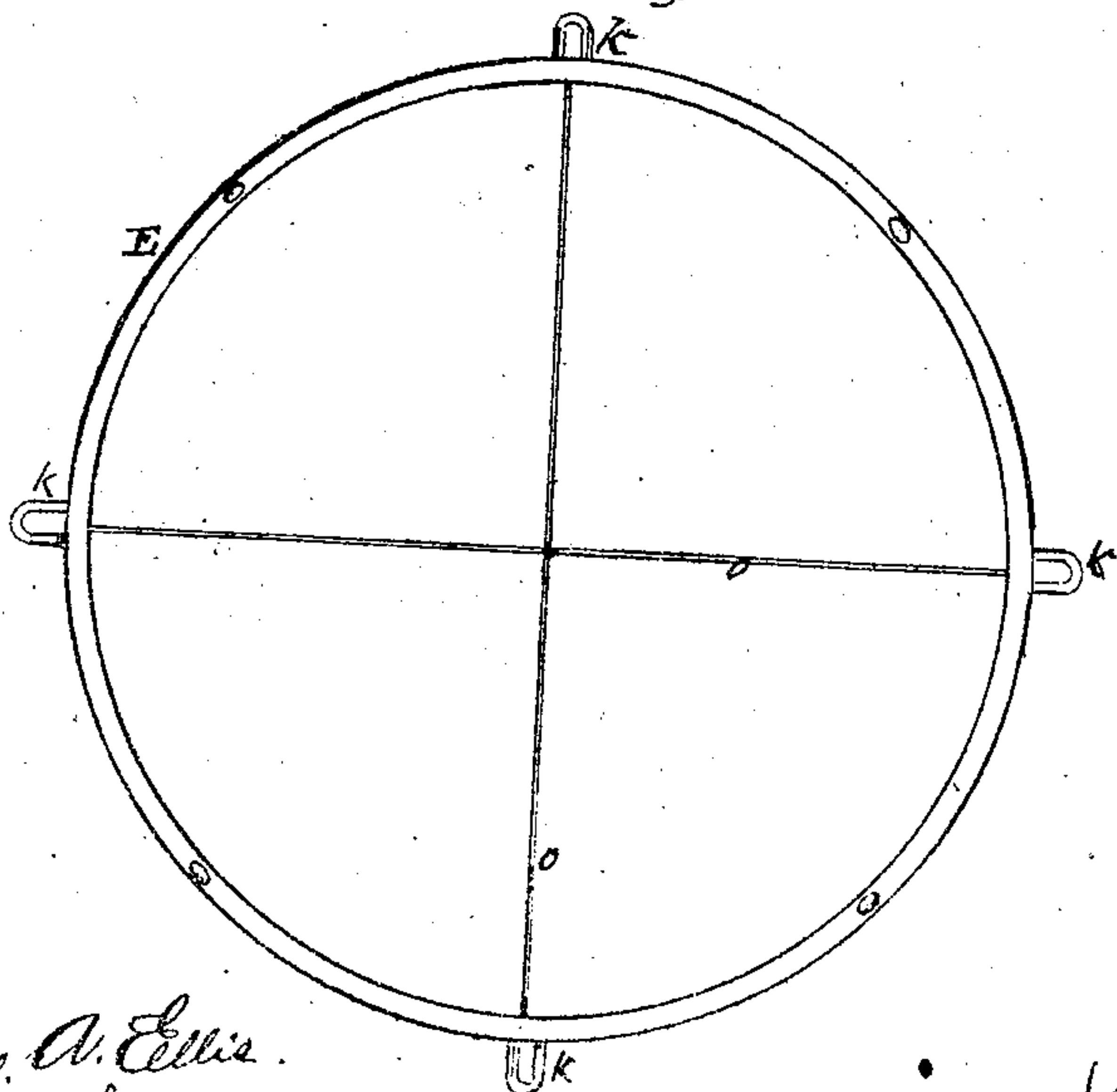


Fig. 3.



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# United States Patent Office.

JOHN F. GAUWEILER AND JOST STENGEL, OF CROTON, MICHIGAN.

Letters Patent No. 74,339, dated February 11, 1868.

## IMPROVEMENT IN FIRE-ALARMS.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, JOHN F. GAUWEILER and JOST STENGEL, of Croton, in the county of Newaygo, and State of Michigan, have invented certain new and useful Improvements in Fire-Alarms; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1, in the annexed drawing, which makes a part of this specification, represents a plan view of our fire-alarm.

Figure 2 is a side elevation of one of the indicators, showing the position in which it will be when the alarm is given.

Figure 3 is an inside plan view of the tank with the bottom removed.

The letter A, in fig. 1, represents a box containing the clock-work necessary to give the alarm. *b* designates a series of indicators, corresponding in number with the apartments in the house to which the alarm is applied. The indicators *b* will be numbered to correspond with the numbers on the several apartments. Each of the indicators will be connected with its respective apartment by means of a wire, *c*, the said wire consisting of sections, eight or ten inches in length, soldered together. The object of forming a continuous wire in this manner is, that the action of fire at any point will melt the solder, and the end of the wire connected with the indicator, being severed from the remaining portion, will leave the alarm free to act in the manner hereinafter described. The indicators, as represented in fig. 1, and marked from one to eleven, are in the position occupied before an alarm. In fig. 2, the letter *b* represents an indicator in the position to sound the alarm. *e* designates a loop of strong wire, the ends of which are made to play on the same axis upon which the indicators have their motion. Each of the indicators has a spring, *g*, which will force it up in the position as seen in fig. 2, the moment the cord or wire which holds the said indicator down is severed, when, by the upward motion of indicator *b*, the loop *e* is raised, as seen in fig. 2. *h* represents a lever, one end of which rests on loop *e*, and the opposite end pressing against the arm *f*, which said arm is connected with pivoted rod *m*. *s* designates a pallet, which is attached to rod *m*, with its hooked ends resting between the teeth of the wheel that operates the clock-work. The lever *h*, which either arrests or gives motion to the alarm, is pivoted at the point *t*, and at its other end is made to press on loop *e*, by means of the India-rubber spring *i*. It will be observed, that the moment any one of the indicators is thrown upward by spring *g*, as already described, the loop *e* will elevate the end of lever *h*, causing the opposite end of said lever to fall below the arm *f*, and by this operation relieve the wheel from the pallet *s*. The clock-work being now in motion, the alarm will be given by hammer, *n* on the bell *d*. E represents a tank, made of any suitable material for containing water, and is to be attached to the interior of a room, or to any other part of a dwelling-house. The said tank will have two partitions *o*, which cross each other at right angles, (see fig. 3,) and also a number of openings in its rim for the escape of the water, the said openings being a little above the level of the water when the tank is placed in a horizontal position. On the rim of the tank E will be fastened the four eyes *k*, to which the like number of cords are attached for suspending the said tank to the ceiling of the room in which it is to operate. When thus suspended, the tank will have a horizontal rotary motion given to it until the suspending-cords are twisted together, and will be held in that position by another cord connecting the tank with the wire that controls the alarm. Thus the fire that melts the solder and disrupts the wire, will also burn the cord that holds the tank E, which will, by the untwisting of the suspending-cords, have a rapid rotary motion, and throw the water rapidly throughout the apartment, and thereby extinguishing the fire, or else so checking it as to bring it under easy control. In case cords should be used instead of wire to act on the indicators, we would interpose spiral springs *j*, at stated distances, for preserving an equable tension. From the wires connected with the indicators, which said wires will run near the ceiling, there will be pendent cords or tape saturated with any inflammable composition. As these pendent strips will approach the floor, they will ignite when the fire breaks out in that direction, and communicate the flame to the wire that operates the indicators, and thus sound the alarm.

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

1. The indicators *b b*, numbered or lettered, and operating substantially in the manner set forth.
2. In combination therewith, we claim loop *e*, as and for the purpose described.
3. The employment of spring-lever *h*, in combination with loop *e*, substantially as specified.
4. The tank E, when suspended and operated substantially as described.

In testimony that we claim the foregoing as our own, we affix our signatures in presence of two witnesses.

JOHN F. GAUWEILER,  
JOST STENGEL.

Witnesses:

PHILIP A. HARRISON,  
GEORGE W. BENNETT.