

(No Model.)

2 Sheets—Sheet 1.

S. R. BALLARD.
TELEPHONE CONVEYER.

No. 383,269.

Patented May 22, 1888.

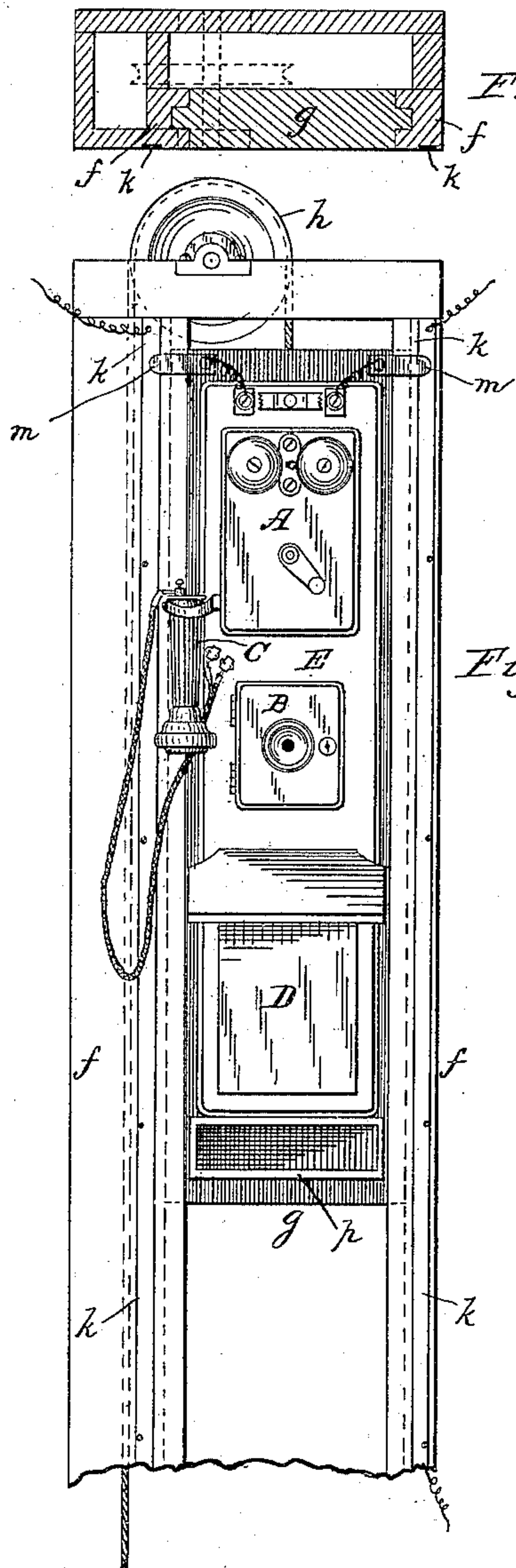


Fig. 1.

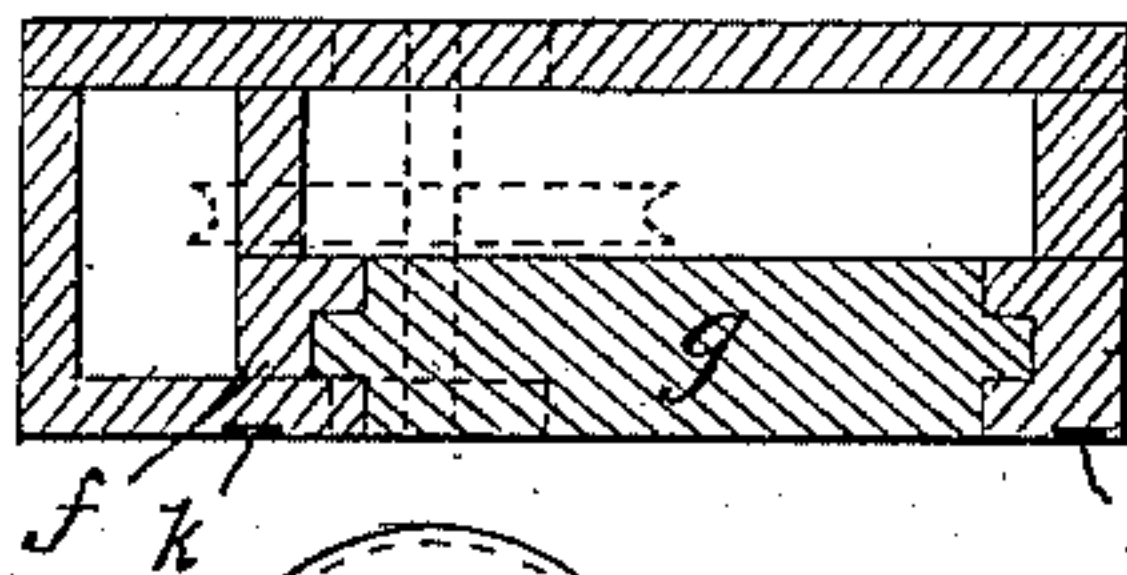


Fig. 2.

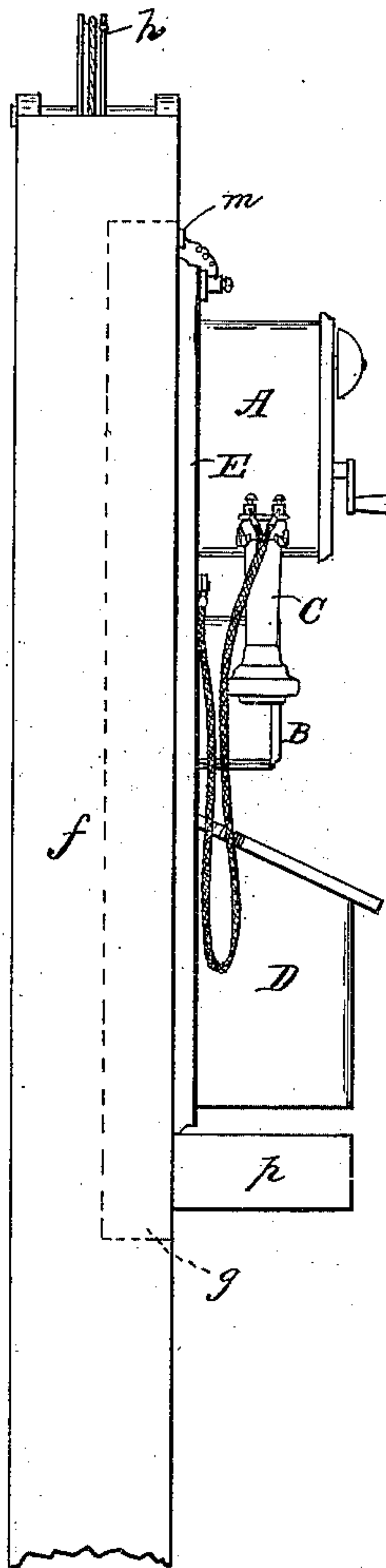


Fig. 3.

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J. C. Spaeth,

Samuel R. Ballard, INVENTOR.

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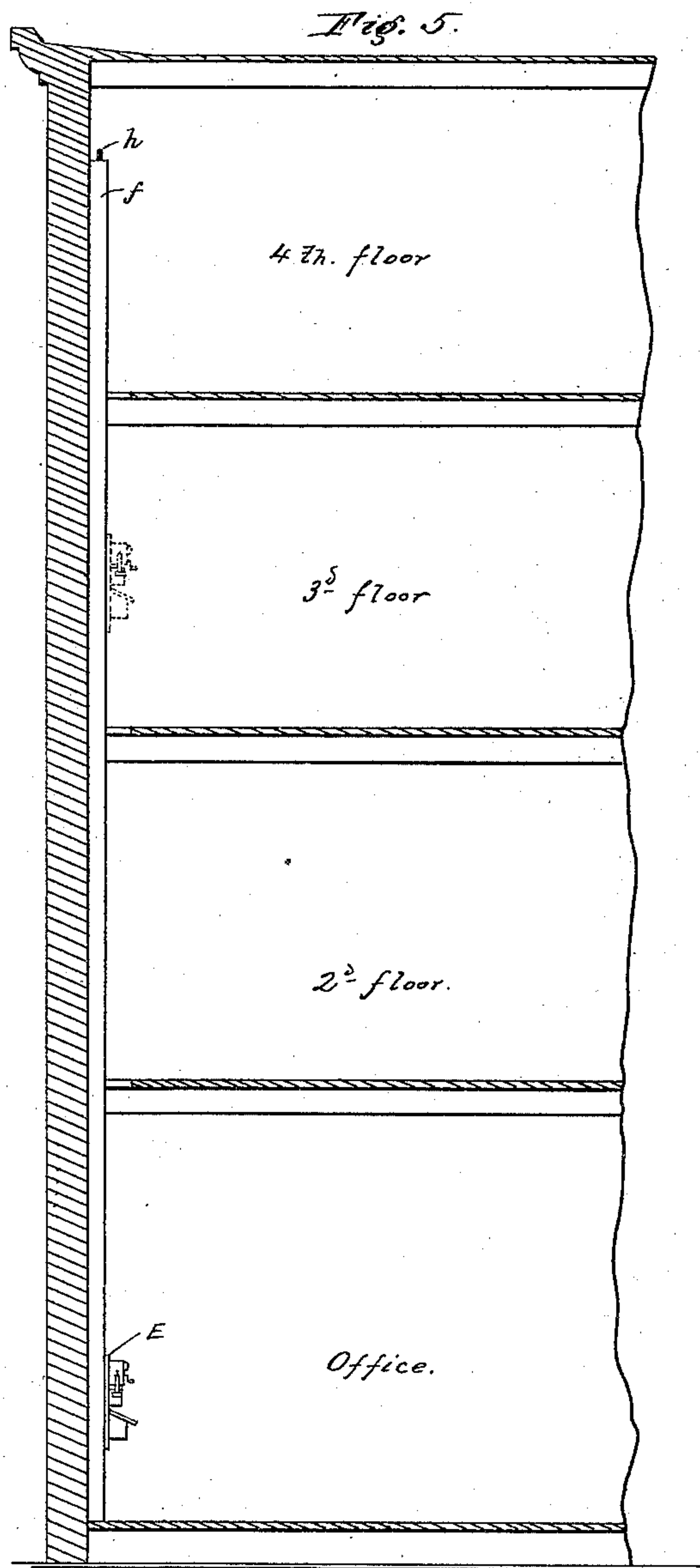
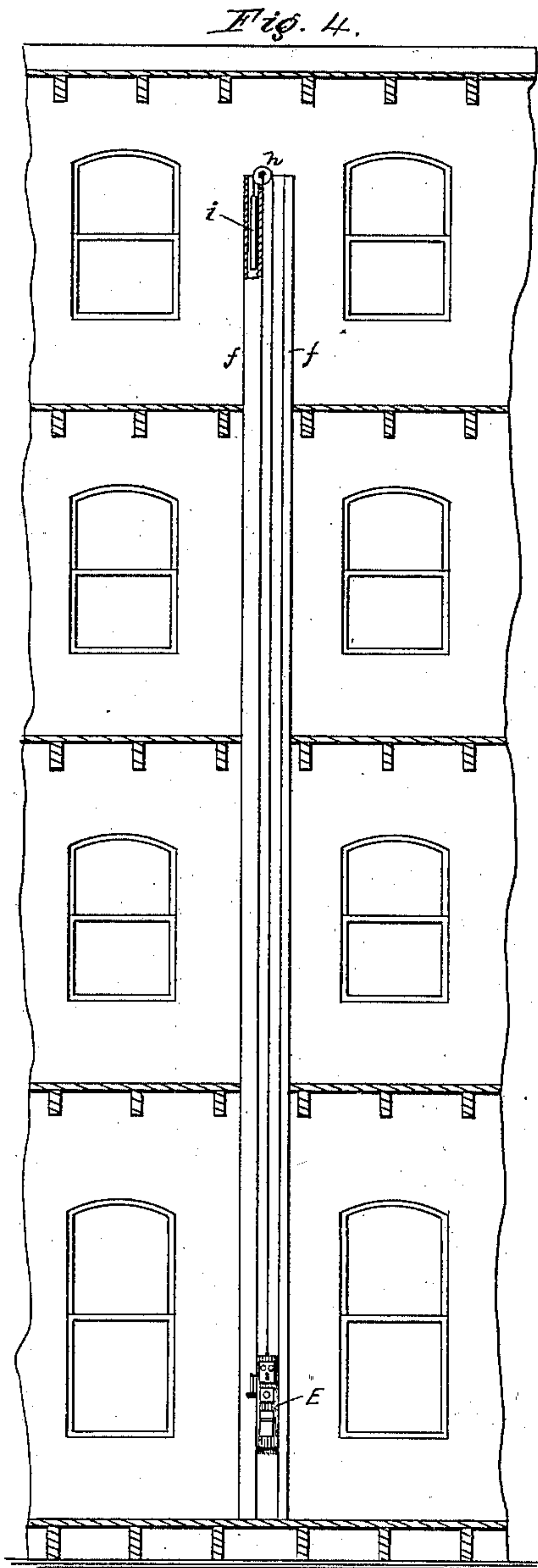
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J. C. Spaeth

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BY
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ATTORNEYS,

UNITED STATES PATENT OFFICE.

SAMUEL R. BALLARD, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO GEORGE V. MARSHALL, OF SAME PLACE.

TELEPHONE-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 383,269, dated May 22, 1888.

Application filed November 19, 1887. Serial No. 255,503. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL R. BALLARD, a citizen of the United States, and a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Telephone-Conveyers, of which the following is a specification.

When a telephone is in use in a manufactory or other large establishment composed of several floors or departments, the general practice is to place the telephone in the business-office, and all parties wishing to use it must come to the office for the purpose. This causes a great amount of inconvenience and annoyance. The situation is especially bad when a call comes by telephone for some member of the firm or the superintendent or other employé to come to the telephone and talk over some matter of more or less importance, and it happens that the person called is in some distant part of the premises, possibly on the top floor. It is a grave loss of time to come all the way to the office and is very annoying.

My invention aims at a means of avoiding the foregoing troubles and inconveniences by such arrangements that on the occasions noted the complete telephone set, comprising the magneto-bell, transmitter, receiver, and battery, may be sent to the party on any floor or to any part of the building, instead of having the person come to the office.

The invention therefore consists in the combination, with a telephone transmitter, receiver, battery, and magneto-bell, of a carriage or conveyer or elevator adapted to movement to and from different parts of a building, and in the arrangement of devices for the purpose, all substantially as hereinafter fully described and claimed.

In the drawings, Figure 1 is a front elevation, Fig. 2 a plan section, and Fig. 3 a side elevation, of one form of conveyer with the telephone attached and connected. Figs. 4 and 5 are vertical sections of a building, showing the conveyer passing each floor.

The word "telephone" as used herein is to be understood as meaning all the apparatus necessary in the transmission of speech. As represented in the drawings, it embraces the

magneto bell A, transmitter B, receiver C, and battery D, all of which are fixed to the single back board, E.

The preferred form of my invention is shown in the drawings, in accordance with which I cut suitable openings in the various floors next the wall of the building, and against the wall erect a light elevator structure composed of the grooved sides *f* and the sliding carriage *g*. From carriage *g* a rope or cord passes over a pulley, *h*, to a counter-weight, *i*, which is made about equal to the combined weight of the carriage and the telephone instruments, magneto, and battery attached thereto, as shown. The side members, *f*, have attached to them the metallic bands or strips *k*, and on these bear the spring-brushes *m*, which constitute the terminals of the telephone. The usual line and ground wires are respectively connected to the strips *k*, so that no matter at what floor the telephone may be it will always be in circuit in the usual manner, and ready for use without other than the ordinary manipulation.

The operation is obvious. If a call comes, and the party called be, for instance, on the third floor of the building, the fact is communicated to him by speaking tube, messenger, or other means, and he merely has to go to the conveyer on that floor and pull up the carriage *g*, which brings the telephone to him, as indicated by dotted lines at Fig. 5. He can then converse with the person calling. On the other hand, any one on any of the upper floors desiring to use the telephone can go to the conveyer, draw the carriage up or down, as the case may be, and send a call in the usual familiar manner. The advantages and freedom from annoyance by the use of my invention are too obvious for extended mention. It is sufficient to say that with its aid the use of the telephone is made as convenient in any part of a building as it is in an ordinary office when the user is always present. The cost of construction is but little, and there is no liability to get out of order.

If preferred, the electric connection may be effected by flexible conductors, after the manner of annunciator-wires in a passenger-elevator.

It is apparent that when the departments of

a factory are spread out on a single floor the conveyer may take the form of a horizontal system, in which case the counter-weight could be dispensed with and the carriage move on
 5 wheels running on horizontal rails. In such event the rails could be utilized as circuit-connections. To facilitate the movement of the carriage *g* in both directions, a draw-cord may extend downwardly from the carriage *g*, and
 10 have its other end attached to the counter-weight *i*. This permits the party on lower floor to operate more readily and send the telephone up while waiting for the party called. A box or drawer, *p*, is also attached
 15 to the carriage *g*, to carry memoranda, letters, books, &c., with the telephone, when necessary or desired.

I claim as my invention—

The combination of the elevator-ways traversing two or more floors of a building, a carriage guided in said ways, a telephone transmitter, receiver, magneto call-bell, and battery mounted thereon, and having automatic switch, line, and ground connections constantly connected to said switch, a counter-weight for the carriage and its contents, and an operating-rope attached to said counter-weight at one end and at the other to the movable carriage, substantially as described. 20 25

Signed at Pittsburg, in the county of Allegheny and State of Pennsylvania, this 4th day of November, A. D. 1887. 30

SAMUEL R. BALLARD.

Witnesses:

GIBSON D. PACKER,
 C. C. LEE.