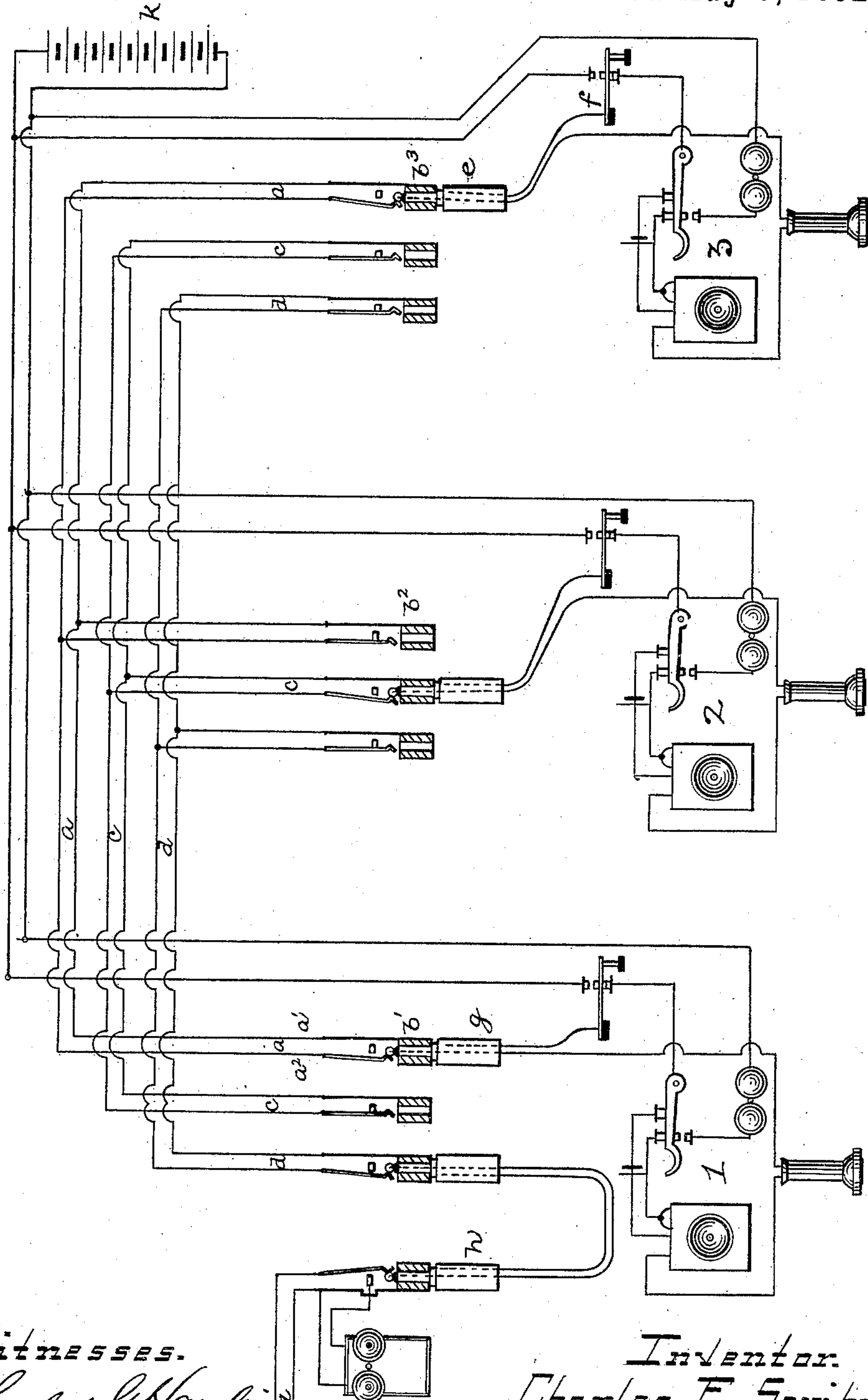


(No Model.)

C. E. SCRIBNER.
HOUSE TELEPHONE SYSTEM.

No. 474,067.

Patented May 3, 1892.



WITNESSES.

Charles G. Hawley.
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UNITED STATES PATENT OFFICE.

CHARLES E. SCRIBNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WESTERN ELECTRIC COMPANY, OF SAME PLACE.

HOUSE-TELEPHONE SYSTEM.

SPECIFICATION forming part of Letters Patent No. 474,067, dated May 3, 1892.

Application filed November 22, 1889. Serial No. 331,204. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SCRIBNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in House-Telephone Systems, (Case No. 214,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

Heretofore several offices in the same building have been provided with circuits and telephone apparatus whereby the several offices can be readily connected together telephonically. In such house-telephone-exchange systems single or grounded circuit lines have been employed, each station having a line extending to each of the other stations.

My invention herein relates more particularly to metallic circuits and apparatus for doing this work and to a battery having each of its poles carried to each of the different stations and so arranged that one station may signal to another station for telephonic communication.

My invention is illustrated in the accompanying drawing, in which I have shown three such office-stations and the circuits and telephone apparatus connected therewith, means being shown at one of said stations for connecting with the city telephone-line. A metallic circuit extends from each station to all the other stations, and each of these circuits is provided at each of the stations with a socket provided with two contacts, by means of which the two limbs of the circuit may be looped with the different sizes of the cord of the connecting-plug. Thus I will consider line *a* as belonging to station 1. This line consists of the two limbs *a'* *a''*, extending to each of the stations and provided at each with a connecting device having two terminals, these connecting devices being the same at each of the stations. Thus the connecting device *b'* of station 1 may be precisely the same as the connecting device *b''* of station 2 and of the connecting device *b'''* of station 3. I will consider the metallic circuit *c* as belonging particularly to station 2 and the metallic circuit *d* as belonging to the station 3.

The apparatus at each station consists of a telephone, a telephone-switch, and a bell, and also a signaling-key for bringing the battery into circuit with the bell of the station and the line extending to any other station and including the bell at the other station. At station 3 the telephone is shown removed from the switch and the loop-plug of said switch inserted in the connecting device *b'''* of line *a* of station 1. The telephone at station 1 being removed from the switch, the telephones at the two stations are looped together into the metallic circuit *a*. Now in order that the user at station 3 may signal the user at station 1 he must insert his loop-plug *e*, as shown, into the switch *b'''* of line *a*, and the telephone being on the switch at station 3 the user at station 3 will close the key *f* to the battery-contact. Thus the battery will be looped into the circuit of line *a*, so as to include the bells at said station 1, it being understood, of course, that the telephone at station 1 is also hung upon the switch when the battery is thus looped into circuit. Immediately after sending the signal both users will take down their telephones, it being understood that loop-plug *g* will be normally inserted in the socket of line *a* of said station 1, so that when both users have thus taken down their telephones their telephones will be looped into the metallic circuit *a*, as shown. In this instance I will suppose that the user at station 3 desires connection with the city line *i*. After connection has thus been made he will simply inform the user at station 1 of this desire, and it will be the duty of the user at station 1 to insert the loop-plugs *h* into the switch of the city line *i* and the switch of the line *d*, as shown. Thus the city line *i* will be looped in metallic circuit with the house line *d* of the user of station 3. The user at station 3 now will remove the loop-plug from switch device *b'''* and insert the same into the switch of line *d*, and thus the telephone of the user at station 3 will be looped into the circuit of the city line *i*. The signal to disconnect will be given orally to the user at station 1. This order may be given by simply inserting the loop-plug again in switch *b'''* and signaling again the user at station 1.

It will be noted that the battery *k* is pro-

vided with connections at each of the stations 1, 2, and 3, and by means of suitable keys this battery may be used to signal between the different stations, as before described.

5 Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

1. The combination, with three or more users' telephone-stations, of metallic-circuit
10 telephone-lines, one for each station, extending each to all the stations and provided each with a connecting device at each station, and a user's outfit at each station, consisting of a loop-plug and cord, a telephone-switch, a tele-
15 phone and bell, and a battery with both poles extended to each of said stations and normally open, and a key included in one strand of each of the cords at each station, whereby the user at any given station may readily signal any

other station to bring the two stations into 20 telephonic connection over a metallic circuit.

2. A city telephone-line connected in metallic circuit with a connecting device at one of three or more users' stations, said users' stations being reciprocally connected together 25 by metallic circuits, one for each station, a user's outfit at each station, a battery with its poles extended to each of said stations, and switching apparatus whereby either station may be connected with another in metallic 30 circuit or with the city telephone-line, substantially as and for the purpose specified.

In witness whereof I hereunto subscribe my name this 19th day of November, A. D. 1889

CHARLES E. SCRIBNER.

Witnesses:

ELLA EDLER,

GEO. R. PARKER.