

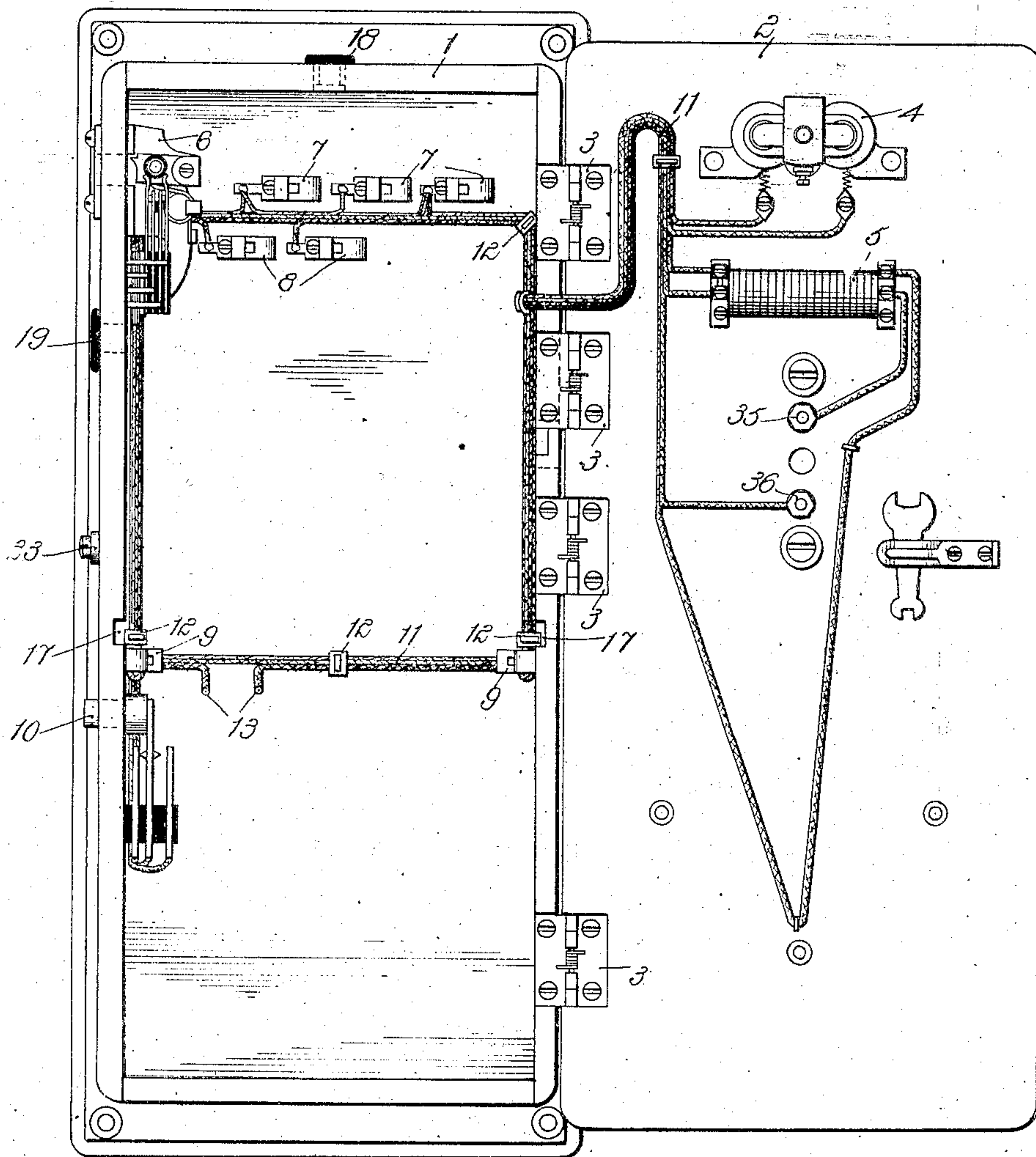
A. M. HAUBRICH.
 SYSTEM FOR PACKING AND SHIPPING TELEPHONE APPARATUS.
 APPLICATION FILED MAY 23, 1913.

1,218,998.

Patented Mar. 13, 1917.

3 SHEETS—SHEET 1.

Fig. 1.



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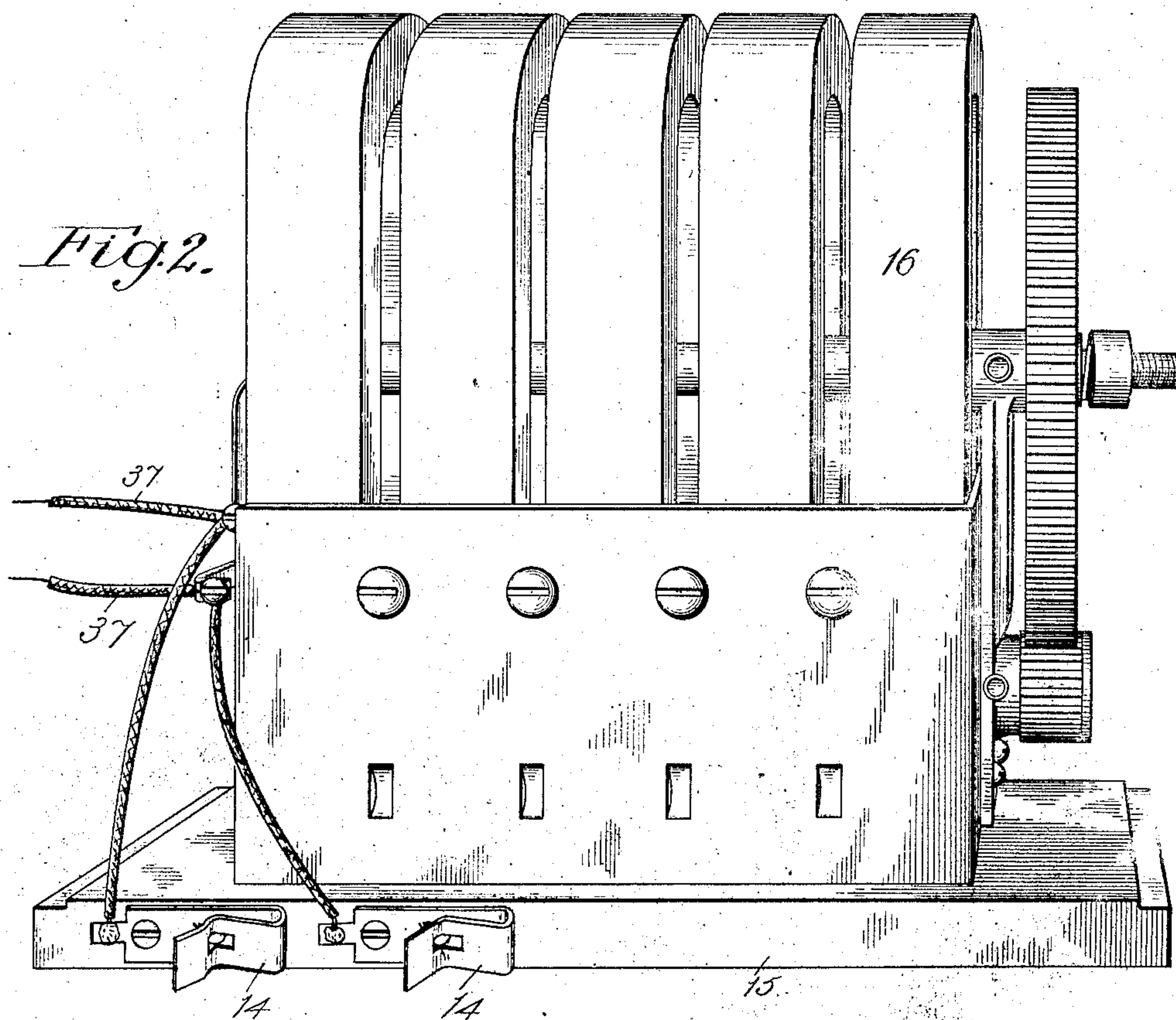


Fig. 10.

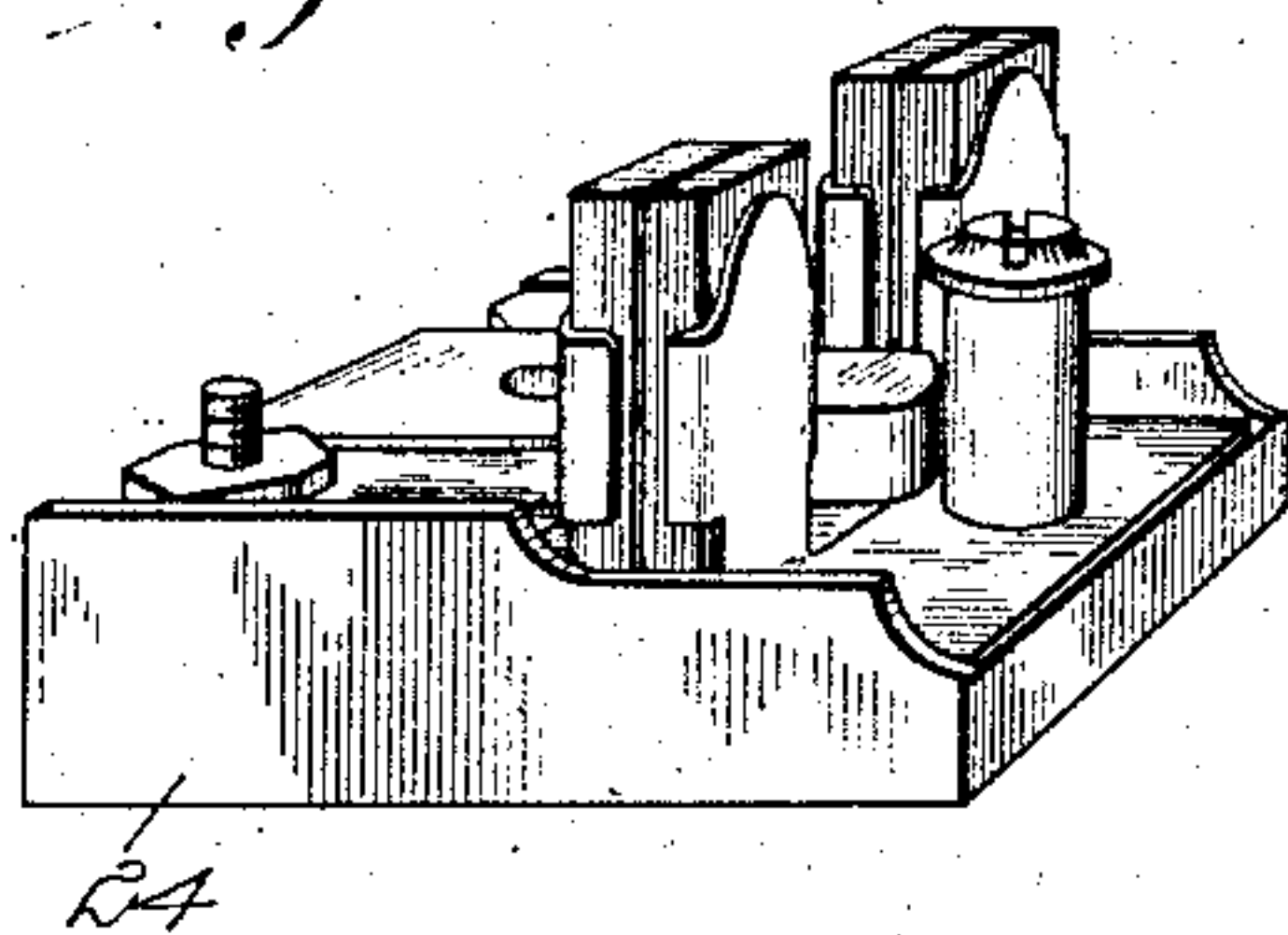


Fig. 11.

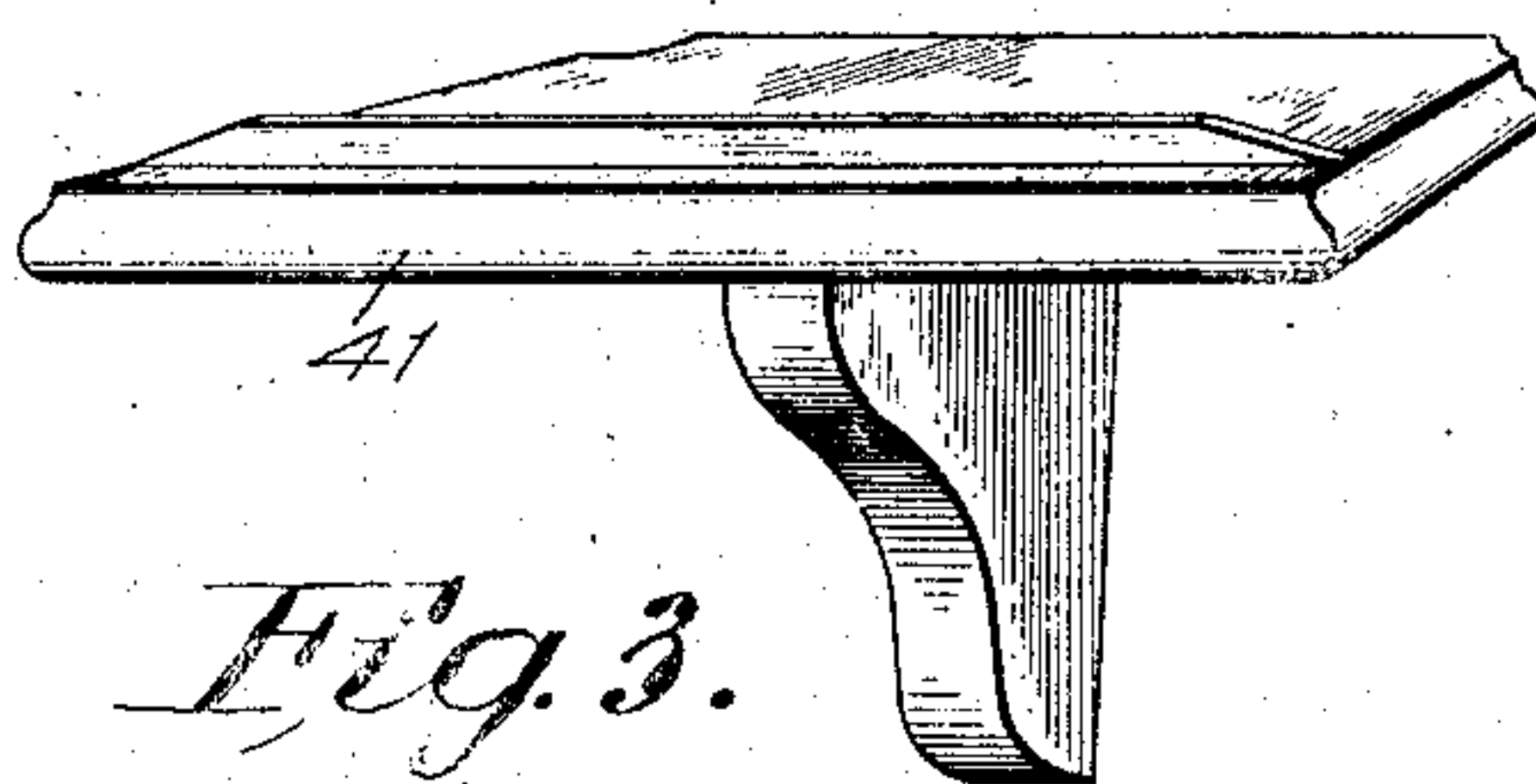
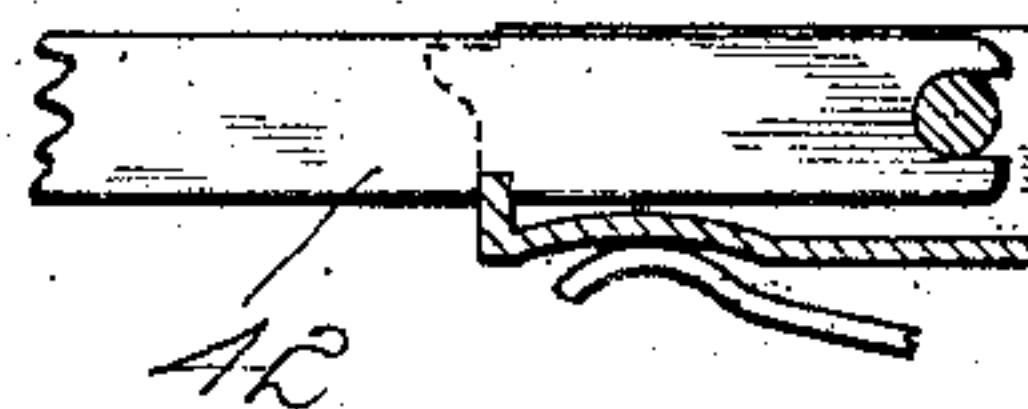


Fig. 3.

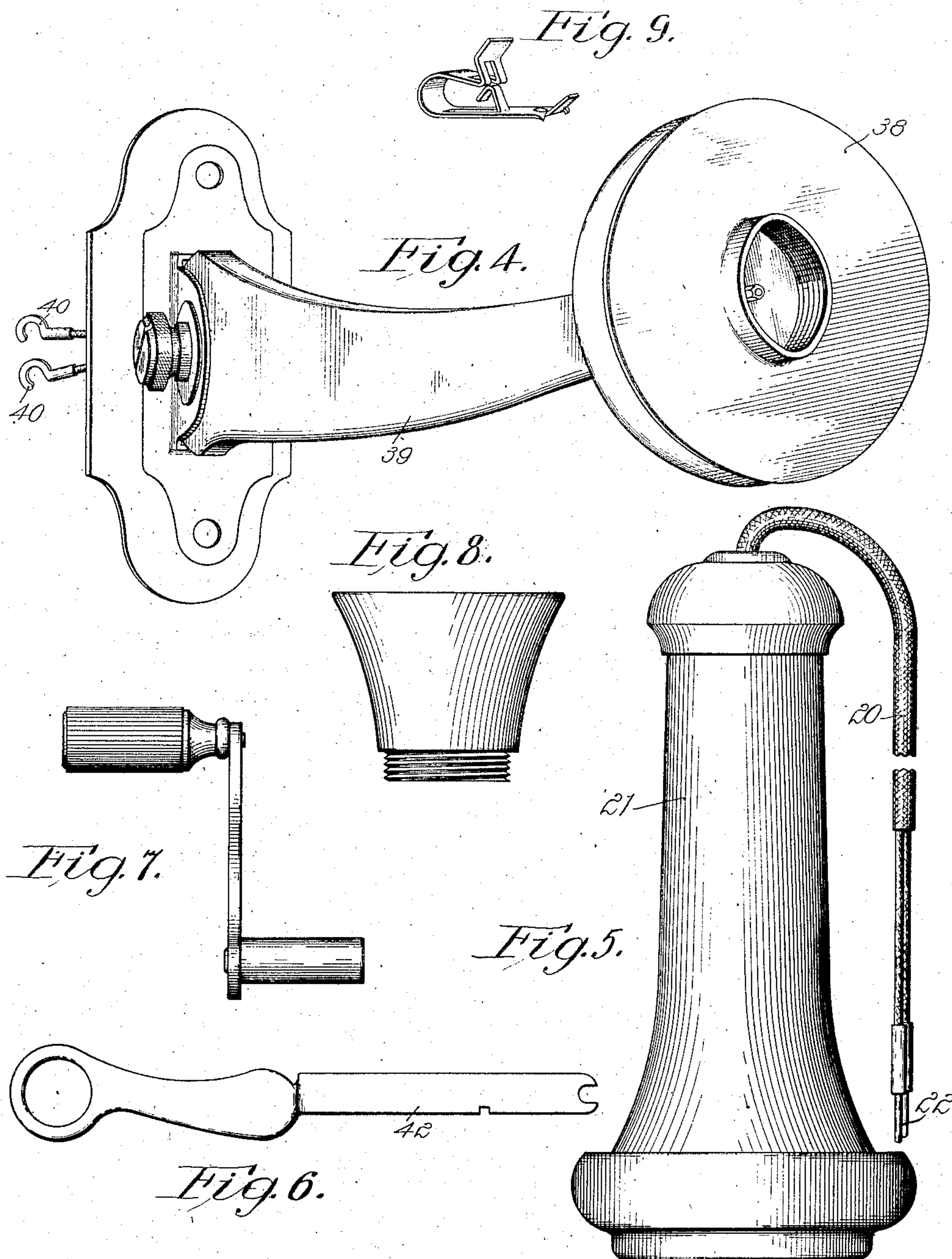
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UNITED STATES PATENT OFFICE.

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SYSTEM FOR PACKING AND SHIPPING TELEPHONE APPARATUS.

1,218,998.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALEXANDER M. HAUBRICH, 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 Systems for Packing and Shipping Telephone Apparatus, 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.

My invention relates to an improved system of packing and shipping telephone apparatus, and also to an improved construction of apparatus by which it may readily be taken apart so as to be temporarily packed in separate parts to facilitate bringing the packages within the prescribed limits of weight and size laid down by the carrier.

More specifically, my invention contemplates constructing wall telephones in such a manner that parts which have heretofore been rigidly associated together in the structure may be readily separated from each other so that the remaining casing and the parts permanently secured thereto may form a first package for shipping, which package will come within all of the requirements as to weight and size prescribed by the carrier, while the removable parts, such as the generator, battery, transmitter, and receiver, and some other smaller parts, may readily be packed in two separate packages, each of which is within the limits of weight and size above-referred to.

My invention is of particular value in connection with the shipment of telephones by the recently-inaugurated parcel post system of the United States Post Office Department, since by it telephones may be shipped very conveniently to farmers throughout the country, wherever they are located, and the telephones will be delivered directly to the purchaser's door; whereas, if the telephones could not be brought within the limits of weight and size prescribed by the parcel post regulations it would be necessary to ship by some other means, and as a result the purchaser would necessarily be obliged to make a special trip, frequently of considerable length, to get the telephone from the receiving station. Wall telephones as constructed previous to my invention and as

commonly shipped heretofore, have exceeded the limits placed upon packages which may be shipped by parcel post; and before my present invention the construction of wall telephones has not permitted of their being readily taken apart at the factory, packed in separate packages which will readily come within the limits of the parcel post system, and which will permit the purchaser to readily place the separated parts together in proper position to constitute the complete telephone. By my present invention the circuit connections are specially arranged so that they may be made by any person, however inexperienced, in order to connect the different parts together; and furthermore, the separation of the parts for shipping and the use of circuit connections of the kind employed permits a novel method of wiring the telephone cabinet which particularly facilitates the construction of the telephone at the factory. As a part of my invention I also employ distinctive means for indicating to the purchaser that the several separate packages containing the different parts of the telephone are, in fact, a part of the same structure; as for example, the package containing the cabinet will have affixed to it the caption, either by means of marking the words directly upon the package, or affixing thereto a printed label, as follows:

"This is Package X containing one of three parts of the

BLANK

Parcel Post Compact Telephone. Packages Y and Z should be delivered with this package at the same time, and constitute a part of this telephone."

A second package containing a part of the same telephone is preferably similarly marked, as follows:

"This is Package Y containing one of three parts of the

BLANK

Parcel Post Compact Telephone. Packages X and Z should be delivered with this package at the same time, and constitute a part of this telephone."

The third package is preferably similarly marked, as follows:

5 "This is Package Z containing
one of three parts of the
BLANK
Parcel Post Compact Telephone.
Packages X and Y should be de-
livered with this package at the
10 same time, and constitute a part
of this telephone."

From the identifying data just indicated, to which may be added a common number upon each of the three packages, it will
15 appear that the several packages, although physically separate from each other and coming within the provisions of the parcel post system, are in effect a single telephone, and remain such through the identifying
20 data referred to. It will be understood, of course, that I do not limit the number of packages to three, as any other number may be employed to meet the requirements of any particular construction, I have found,
25 however, by experience, that a wall telephone may be shipped in three packages, as referred to above, and to be more completely described below.

The manner of carrying out my invention
30 will appear more clearly from the drawings, which are as follows:

Figure 1 shows in front elevation, the cabinet of a wall telephone, together with the fixtures and wiring which are perma-
35 nently secured to it, the door of the cabinet being in open position.

Fig. 2 is a perspective view of the generator mounted upon its supporting shelf and removed from the cabinet for shipment.

40 Fig. 3 is a perspective view of the shelf mounted upon the front of the door of the cabinet when the telephone is assembled, this shelf being removable for the purpose of packing the telephone.

45 Fig. 4 is a perspective view of the transmitter and transmitter arm and bracket removed from the cabinet for shipment.

Fig. 5 is a view of the receiver and receiver cord, as removed from the cabinet
50 for shipping.

Fig. 6 is a view of the switch-hook removed from the cabinet for shipping.

Fig. 7 is a view of the generator crank removed from the generator shaft to facilitate packing and shipping.
55

Fig. 8 is a view of the mouthpiece removed from the transmitter to facilitate packing and shipping.

Fig. 9 is a perspective detailed view of one of the binding clamps preferably employed to connect the wiring when the parts are properly assembled by the purchaser.
60

Fig. 10 is a perspective view of the lightning arrester used with the form of cabinet
65 shown in Fig. 1, which lightning arrester

may be located at any desired point outside of the telephone.

Fig. 11 is a detailed view of the hook-switch showing the nature of the connection between the switch-hook shown in Fig. 6 and
70 the part with which it coöperates when assembled in operating position in the telephone.

Similar numerals refer to similar parts throughout the several views.
75

As shown in Fig. 1, the telephone cabinet 1 is provided with a door 2, hinged to the cabinet at 3. The door has mounted thereon a ringer 4 and an induction coil 5, and the cabinet 1 has mounted thereon a
80 hook-switch 6, line connectors 7, receiver connectors 8, battery connectors 9 and a push-button 10, these parts being connected together by cabling 11, so arranged that it is made on a form in the proper manner and
85 inserted bodily in the cabinet 1 where it may be held by a few staples 12, as indicated. This does away with much of the work that has heretofore been necessary in wiring the
90 cabinet, for by this means there is no wiring at all which passes through openings in the cabinet body or door, nor is there any wiring which is concealed on the back of the cabinet.

The ends 13 are for connection with the
95 binding connectors 14 carried by the shelf 15 which supports the generator 16 when said shelf 15 has been inserted in place in the grooves 17 formed therefor in the inner surfaces of the side walls of the cabinet 1.
100 An insulating bushing 18 is provided for the line wires where they enter the cabinet 1 and a similar bushing 19 is provided for the conductors 20 of the receiver 21, which conductors are provided with the terminals 22.
105 The cabinet is provided with a screw-lock 23 for holding the door 2 in closed position when the telephone is ready for use.

It will be understood that the generator may be of any desired type, depending upon
110 the service to be performed; as for example, it may be either a plain alternating-current generator having but two terminals, as indicated, or it may be a pulsating generator having three terminals, or, in fact, any form
115 of generator that the particular circumstances may require.

The push-button 10 is for the purpose of effecting so-called "sure-ringing" of a central office on a party line in a manner well
120 known in the art, by ringing between one side of the telephone circuit and the ground connection, the signal at the central office being similarly connected so that it will respond without ringing the ringers on the
125 metallic circuit of the party line. It is immaterial where this push-button is located in the cabinet.

It will be understood that any desired telephone circuit may be employed in car-
130

rying out my invention, depending upon the particular system in connection with which the telephones are designed to operate, the only requirement being that the apparatus shall be conveniently disposed in the cabinet for carrying out the functions of signaling and talking and establishing proper circuit conditions for the signaling and talking conditions, depending upon the telephone system employed.

The various spring terminals referred to above, it will be understood, may be located at any desired points in the cabinet where it is most convenient in connection with the particular telephone system employed.

The transmitter 38 is provided with connectors extending through the transmitter arm 39 and ending in terminals 40 which may be readily secured to the terminals 35 and 36 shown in Fig. 1. Bolts 38^a are provided for holding the transmitter arm in place upon the front of the door of the cabinet.

The receiver 21 is secured in proper position in the cabinet by passing the conductors 22 through the bushing 19, and securing the terminals 22 in the binding clamps 8. The shelf 41 is secured in position upon the front of the door of the cabinet by suitable screws through the holes indicated, and the switch-hook 42 is inserted into the hook-switch mechanism, so that it occupies the position indicated in Fig. 11. Then by placing the mouthpiece in the transmitter and the generator crank upon the generator shaft after the line connections and lightning arrester connections have been made, the telephone is ready for service, assuming that the batteries have been placed in the lower part of the cabinet and properly connected to the binding clamps 9.

The telephone cabinet, in the condition shown in Fig. 1, may constitute one of the packages for shipment, without the addition of any other parts, so that the weight may be kept within the prescribed limit for shipment. The remaining parts may be packed in two packages conveniently by placing the generator 16 and some of the smaller parts, as for example the generator crank, the switch-hook 42 and the lightning arrester 24, in one package, and the remaining parts in the third package, which third package will also contain the two dry batteries usually used in a telephone of this type. It is to be understood that the exact distribution of the parts among the several packages is not important, but that there may be considerable difference in the way in which this is done, the essential thing being that the parts

packed in any one package shall not have a total weight or size greater than the limits prescribed for the shipment of these packages. Furthermore, for certain types of cabinet some of the lighter parts may, if preferred, be shipped in the cabinet, although it is generally the case that the cabinet itself with the parts which it is desirable to secure permanently to it is sufficiently heavy to make it undesirable to pack with the cabinet other of the parts of the complete telephone.

When the generator is in place in the cabinet it may, if desired, be held there by one or two screws through the wall of the cabinet into the shelf supporting the generator, although it is not necessary to so secure the generator in place.

While I have shown my invention in the particular embodiment above-described, it will be understood that I do not limit myself to carrying out my invention in these particular ways, as I may change the manner of carrying out my invention in many details without departing from the spirit of my invention.

What I claim is:

1. In a telephone, the combination of a cabinet, a generator shelf removably supported in the cabinet, a generator rigidly secured to the shelf, telephone apparatus mounted upon the door of the cabinet, binding clamps mounted within the cabinet, and wiring permanently mounted upon the cabinet to connect said telephone apparatus and said clamps, said wiring comprising a separately-formed cable of connectors inserted bodily into the cabinet, said generator and said apparatus being readily removable for shipment.

2. A telephone instrument including a cabinet, a transmitter arm and a transmitter mounted thereon, a generator mounted in said cabinet, a switch hook extending from said cabinet and a shelf mounted on the front face of said cabinet, said cabinet having wiring for said elements grouped in a cable and mounted upon the inner walls thereof, said group of elements being readily separable, for shipment, into units which do not exceed a predetermined weight, said weight being less than the combined weight of all of said elements.

In witness whereof, I hereunto subscribe my name this 19th day of May, A. D. 1913.

ALEXANDER M. HAUBRICH.

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