A NEW AND USEFUL TELEPHONE

The necessity for a telephone which can be used for short distances and which, at the same time, can be obtained at reasonable cost, has been keenly appreciated by thousands of business men. manufacturers

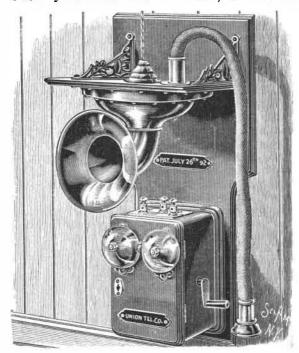


Fig. 2.-THE SIMPSON ACOUSTIC TELEPHONE-HORIZONTAL ARRANGEMENT.

and others, who for various reasons have found the telephone in general use unsuited to their purposes.

Many devices have been constructed for the purpose of meeting this demand but, until recently, with only partial success. Letters patent have been granted within the past twelve months, however, to Mr. A. L. Simpson, of New York, for an altogether new and novel acoustic telephone that is receiving the hearty in dorsement of all who have tested it.

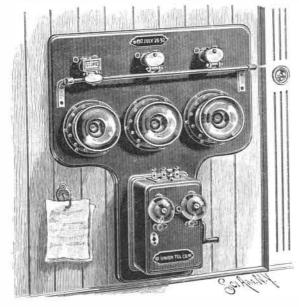
The new telephone in its present perfected state possesses many features essentially superior to all other telephones for private lines of not more than two miles in length, and also for communicating from a central point with the different parts of large manufacturing establishments, public buildings, etc. Conspicuous among its advantages are promptness and reliability of service, perfect articulation at all times, and simplicity of construction. No electric batteries of any kind are used, and hence the telephone is very durable. It is especially adapted for all wishing rapid, cheap and direct communication within a distance of two miles with stables, depots, offices, banks, stores, shops, mines, warehouses, hospitals, hotels and private dwellings.

The instruments are sold outright to those desiring to use them, and thus become the absolute property of the buyer, and remove the necessity for paying the exorbitant rentals charged by other telephone companies.

The different kinds of instruments are illustrated by the following cuts :

Fig. 1 shows the telephone which is suitable to place in a window with the wire running out through the window casing-the telephone being placed on brackets.

Fig. 2 represents the same telephone with upright



different points are brought together. It will be seen there is a horizontal bar with annunciator drops over the top of each mouthpiece. When a party from a distant point desires to communicate, he simply rings his call bell, when the drop over the corresponding mouthpiece at the central board will fall, indicating exactly which line is being operated. On the other hand, if the party at the main board wishes to call any department, he throws the drop down by hand on the line which he wishes to speak over and rings the bell, when the party so called will be simultaneously notified, without disturbing any of the other lines.

All of the materials used in the construction of the telephones are of the best quality, and are assembled for durability as well as service. The essential improvements are as follows :

The frame of the mouthpiece and the diaphragm are constructed in two pieces only. The metal mouthpiece, condensing chamber, and support for the diaphragm being spun of one piece of metal, the diaphragm being bolted to this by means of small screws and bolts. The advantages so derived are essentially a collection and distribution of about 95 per cent of all the sound waves received on the diaphragm, and the avoidance of reverberation, so frequent in many acoustic telephones.

The requirements for constructing the line are very simple, and it is not at all necessary to avoid angles, all that is requisite being to keep the line free from pressure against any solid substance. To avoid this, hangers are furnished through which the line passes, and they can be so adjusted that the line can clear in going through holes in partitions and around angles.

The new telephone has many advantages, also, over the present system of speaking tubes, among them being the fact that it is much cheaper, while, at the same time, there is no necessity for defacing or otherwise injuring the walls of buildings that have been constructed without making provision for such communication, as is the case when introducing speaking tubes.

The company supplies the instruments and, when

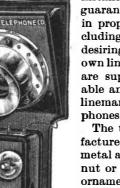


Fig. 1.-THE SIMPSON

TELEPHONE.

installed by its own men, guarantees everything to be in proper working order, including the lines. To those desiring to construct their own lines printed instructions are supplied which will enable any skilled mechanic or lineman to construct the telephones and lines properly.

The telephones are manufactured of highly polished metal and wood (cherry, walnut or ash) and are durable, ornamental and reliable.

The demand for this new instrument has been so extensive and its practical success so great that the company, it is stated, will soon be required to enlarge its manufacturing facilities.

We have had occasion to practically test the telephone on difficult lines, and were surprised at the clearness of articulation and the volume of sound it gives.

The telephone is manufactured by the Union Telephone Co., whose principal office is at Nos. 64 and 66 Broadway, rooms 43 and 44, where the telephones can be seen in practical operation and where further information may be obtained.

We are informed that the telephone is secured by letters patent in the United States, Germany, Canada, England, France and Spain, and the company offers for sale State, city and county rights.

A Right-of-Way May Be Built Over.

Away back in 1832 John Cowman sold lots in the block between 16th and 17th Streets, Union Square and 5th Avenue, and across the rear of lots 1 and 2 reserved 15 feet as an alleyway "subject to a right of passage for horses, carriages and carts for the private convenience of the owners of lots 1, 2 and 3, . . and at the entrance of each of said ways into the street a proper and suitable gate with lock and key is to be kept," etc. When the purchaser bought one of these lots in 1890, he went ahead and extended the building on the front of the lot over and across this right-of-way, supporting the rear part on iron columns TAYLOR'S HYDRAULIC PRESS. a foot in diameter, leaving an open space under the extension through its whole width 15 feet high and 15 feet 9 inches wide. The present owner of one of the working the press. The weighted vessel is preferably adjoining lots tried to get an injunction against him supported by columns resting on the base plate, as to prevent this, but the Court of Common Pleas found shown. that the building as erected does not prevent or obstruct the plaintiff's use of the way underneath it or CANE-SEAT and cane-back chairs, rockers, and setbeyond it. This view has been sustained by the Court tees have been for forty years a specialty with Mr. F. from the window, or in any part of an office or of Appeals. The latter holds that while the deed says A. Sinclair, of Mottville, N. Y., and during that period that the passage is to be "kept open," that does not he has always maintained an enviable reputation for mean open to the sky, or to reserve light and air for the making of thoroughly first-class furniture of this the benefit of the several lots, but only for the passage description, articles which for strength, lightness, durability and neatness leave nothing to be desired.

ADJUSTABLE EMBROIDERY FRAME AND TABLE.

A combined table and embroidery frame, so constructed that it may be readily adapted for use in either service, is shown in the accompanying picture. It has been patented by Mr. Maurice Schmirk, of Fayette, Mo. Upon each upright of the legs a standard or extension is held vertically adjustable by means of registering slots and a bolt and thumb nut,



SCHMIRK'S TABLE AND EMBROIDERY FRAME.

pins upon the standards traveling in the slots of the legs. Downwardly extending arms from the end bars of the embroidery frame are hinged to the upper ends of the standards, and the adjustment of the frame to any desired inclination is effected by link bars or straps pivotally depending from the inner face of each end bar, the straps having notches adapted to engage pins on the inner faces of the standards. The end bars of the frame have each a rib provided with a series of apertures, and through the ends of each end bar pass perforated rods constituting the side bars of the frame, these rods being held in rigid engagement with the end bars by set screws. By this means, and with a similarly arranged brace bar below, the standards may be carried to or from each other to lengthen or shorten the frame, and by loosening the side rods the goods to be embroidered may be rolled up. The removable table top for use with the frame has battens on the under side near each end, provided with pins adapted to enter apertures in the end bars of the frame, and hold the top in rigid connection therewith. The table top, as well as the frame, may be adjusted at any desired inclination from the horizontal to the vertical, as shown in dotted lines in one of the views.

AN IMPROVED HYDRAULIC PRESS.

The press shown in the accompanying illustration is more especially designed for use in compressing cotton bales or other articles under very heavy pressure, the resistance being furnished without relying on the tensile strength of rods and links. This improvement has been patented by Mr. John F. Taylor, of West Park, N.Y. Hydraulic cylinders, erected upon a suitably constructed base, carry the lower platen of the press, and the upper platen is secured on the under side of a vessel of considerable size adapted to be filled with an inexpensive but heavy material, the weight being sufficiently heavy to meet all resistance required in

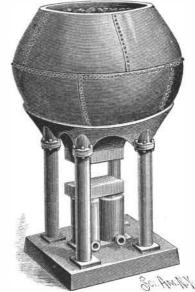


Fig. 3.-MULTIPLE ACOUSTIC TELEPHONE FOR FACTORIES.

mouthpiece, which is especially adapted to meet the wants of those wishing to place the telephone back hallway. This style of acoustic telephone is entirely new.

Fig. 3 shows the main board of the multiple-duplex system, which is to be used where several lines from of horses, carriages and carts.