

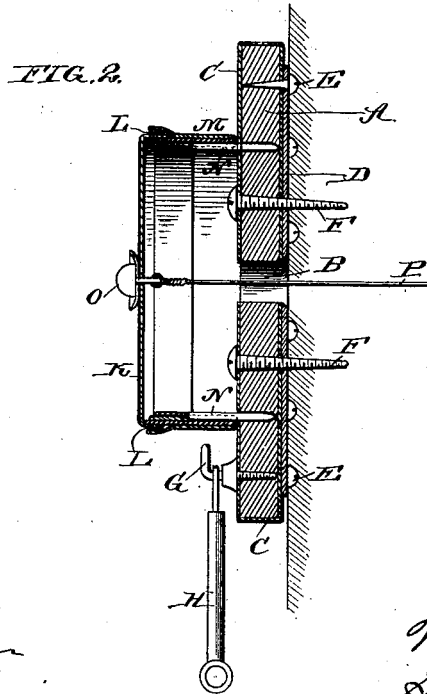
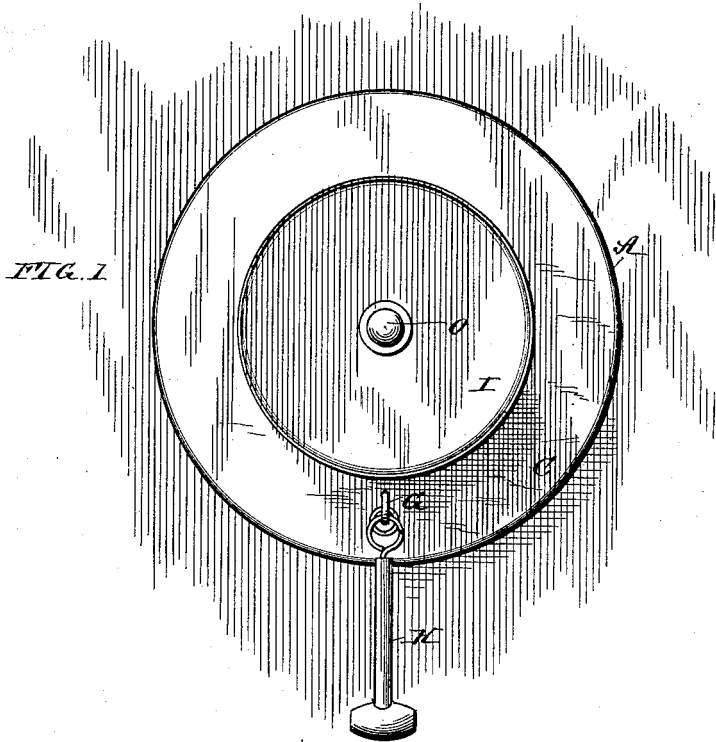
(No Model.)

N. B. STUBBLEFIELD & S. C. HOLCOMB.

MECHANICAL TELEPHONE.

No. 378,183.

Patented Feb. 21, 1888.



Witnesses.  
*Jos. A. Ryan*  
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Inventors  
*N. B. Stubblefield*  
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their Attorneys.

# UNITED STATES PATENT OFFICE.

NATHAN B. STUBBLEFIELD AND SAMUEL C. HOLCOMB, OF MURRAY,  
KENTUCKY.

## MECHANICAL TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 378,183, dated February 21, 1888.

Application filed February 19, 1887. Serial No. 228,231. (No model.)

### *To all whom it may concern:*

Be it known that we, NATHAN B. STUBBLEFIELD and SAMUEL C. HOLCOMB, citizens of the United States, residing at Murray, in the county of Calloway and State of Kentucky, have invented a new and useful Improvement in Acoustic Telephones, of which the following is a specification.

Our invention relates to an improvement in acoustic telephones; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a front elevation of an acoustic telephone embodying our improvements. Fig. 2 is a vertical central sectional view of the same.

A represents a base-board, which is made of wood, and is circular in shape and provided with a central opening, B. The face and edges of the board are covered with velvet cloth, as at C, the said cloth having its edges drawn over and upon the rear side of the base-board, and secured thereto by means of a circular sheet of tin, D, the latter having its edges secured to the base-board by means of headed nails E.

F represents a pair of screws which extend through the base-board, one above and the other below the central opening, B, the function of the said screws being to secure the telephone to a wall or other supporting object. From the face of the lower side of the base-board projects a hook, G, from which is suspended a mallet, H, that is used for calling the operator at the distant station.

I represents a circular drum which is made of sheet metal, preferably of tin. Over the outer side of the said drum is stretched a diaphragm, K, which is made of linen or other suitable cloth, and has its edge secured to the sides of the drum by means of cords L, which are wound and tied tightly around the drum, so as to surround the edge of the diaphragm, as shown at Fig. 2. The outer side of the drum is then covered with velvet cloth, as at M. From the inner edge of the drum project two or more securing-pins, N, which are adapted to enter corresponding openings made

in the face of the base-board, and whereby the drum and the diaphragm are secured centrally to the base-board. The space between the base-board and the diaphragm and inclosed by the drum constitutes an air-chamber with which the opening B communicates.

O represents a button, the shank of which passes through an opening made in the center of the diaphragm, the button resting against the front side thereof. A wire, P, is attached to the shank of the said button and is drawn tightly, so as to tightly stretch the diaphragm, and extends through the opening B, the other end of the said wire being attached to a similar button in the diaphragm of a companion acoustic telephone located at the distant station.

In order to obtain the best results, we coat the diaphragm with copal varnish on both sides, which varnish, after it is dry, contributes materially to the resilience of the diaphragm and increases its sensibility, thereby enabling it to vibrate with maximum amplitude and mobility. The outer side of the diaphragm is then gilded or bronzed.

The simplicity of the telephone will commend itself to the public, while its advantages for talking over crooked or crossed lines will be seen at once.

Having thus described our invention, we claim—

In a mechanical telephone, the combination of the base-board A, the drum arranged on the base-board and having projecting pins N to enter the same, the cloth diaphragm stretched over the drum and secured thereto, the button on the outer side of the diaphragm and having the eye projecting through the center thereof, and the wire P, passed through an opening in the base-board and attached to the eye of the button, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

NATHAN B. STUBBLEFIELD.  
SAMUEL C. HOLCOMB.

Witnesses:  
OSCAR HOLT,  
B. B. LINN.