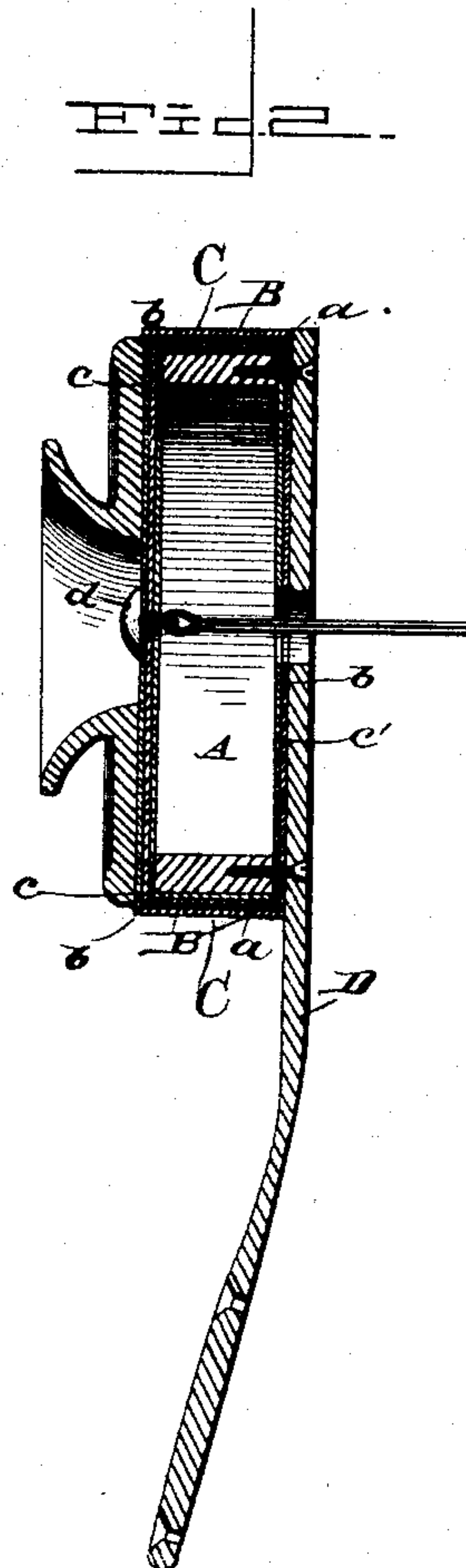
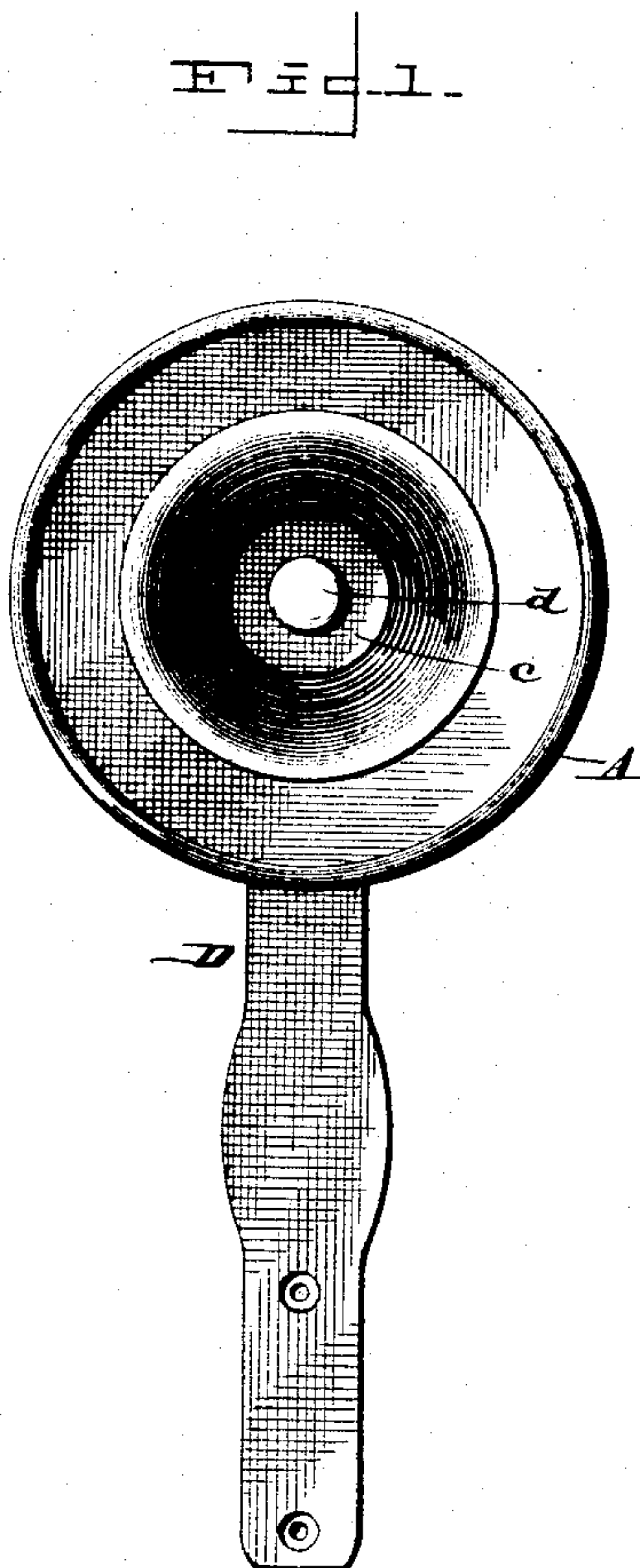


(No Model.)

W. NAYLOR, Dec'd.
E. CRAIG, Administrator.
MECHANICAL TELEPHONE.

No. 412,653.

Patented Oct. 8, 1889.



WITNESSES
Matter N. Humphrey.
Paul W. Stevens.

INVENTOR
William Naylor
By *[Signature]* Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM NAYLOR, OF ALBION, ILLINOIS; EDWARD CRAIG ADMINISTRATOR
OF SAID WILLIAM NAYLOR, DECEASED.

MECHANICAL TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 412,653, dated October 8, 1889.

Application filed March 25, 1889. Serial No. 304,604. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM NAYLOR, a citizen of the United States of America, residing at Albion, in the county of Edwards and State of Illinois, have invented certain new and useful Improvements in Telephones, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention pertains to an improvement in acoustic telephones; and it consists in the peculiar structure, combination, and arrangement of the parts, substantially as hereinafter more fully shown and described.

15 In the drawings, Figure 1 is a front view, and Fig. 2 is a sectional elevation, of my improved mechanical telephone.

In constructing my telephone I employ a wooden band A, whereon is tightly stretched
20 the diaphragm B, which is tacked and glued thereto. A metallic band C, while the glue is hot, is then forced over the wooden band, which rigidly and securely retains the diaphragm in position between the metallic and wooden
25 bands, as shown. The diaphragm or transmitter consists of one sheet *a* of best linen canvas, one sheet of card-board *b*, and one sheet *c* of best linen paper, which are thoroughly glued together with damp-proof glue made
30 specially for the purpose, and its exposed portions may be protected from dampness by means of varnish or paint, or in any other well-known manner. The telephone-wire is attached to the diaphragm by means of but-

ton *d*, and thus arranged it will never draw 35 the diaphragm so as to touch the back and render it unfit for use.

The back of the telephone consists of one sheet of card-board *b'*, painted or varnished, and one of linen paper *c'*, glued together in 40 the same manner as the diaphragm and fastened to the face of wooden band A in any ordinary manner.

In securing the telephone in position it is attached to spring D to enable the expansion 45 and contraction of the wire to be thus automatically adjusted.

Thus constructed, a highly efficient and inexpensive telephone is produced.

Having thus fully described my invention, 50 what I claim, and desire to secure by Letters Patent, is—

In a mechanical telephone, the combination of the wooden band A, the metallic band C, the diaphragm consisting of the combined 55 layers of linen canvas, card-board, and linen paper glued together, and the backing consisting of the combined layers of card-board and the linen paper glued together, said diaphragm being clamped on said wooden band 60 by said metallic band, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM NAYLOR.

Witnesses:

EDWARD CRAIG,
J. T. WHITING.