(No Model.)

# P. D. COX.

## COMBINED TELEGRAPH KEY AND SOUNDER.

No. 526,965. Patented Oct. 2, 1894.

Fig 1

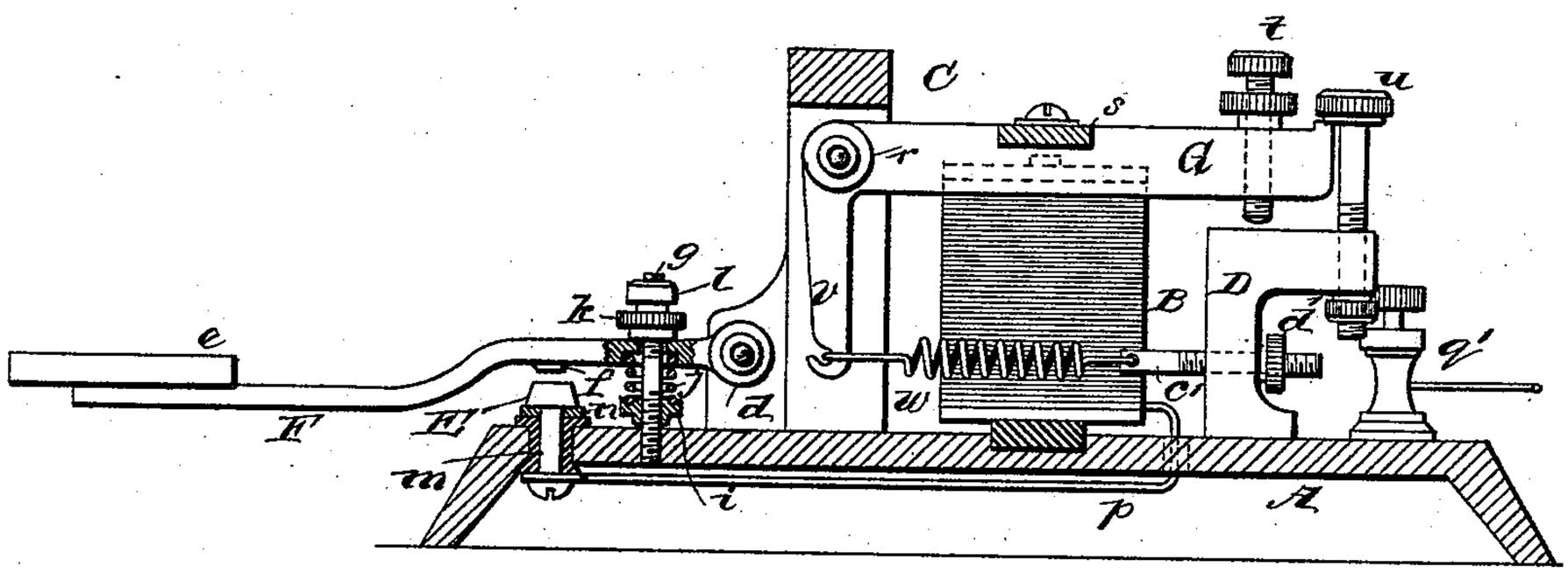
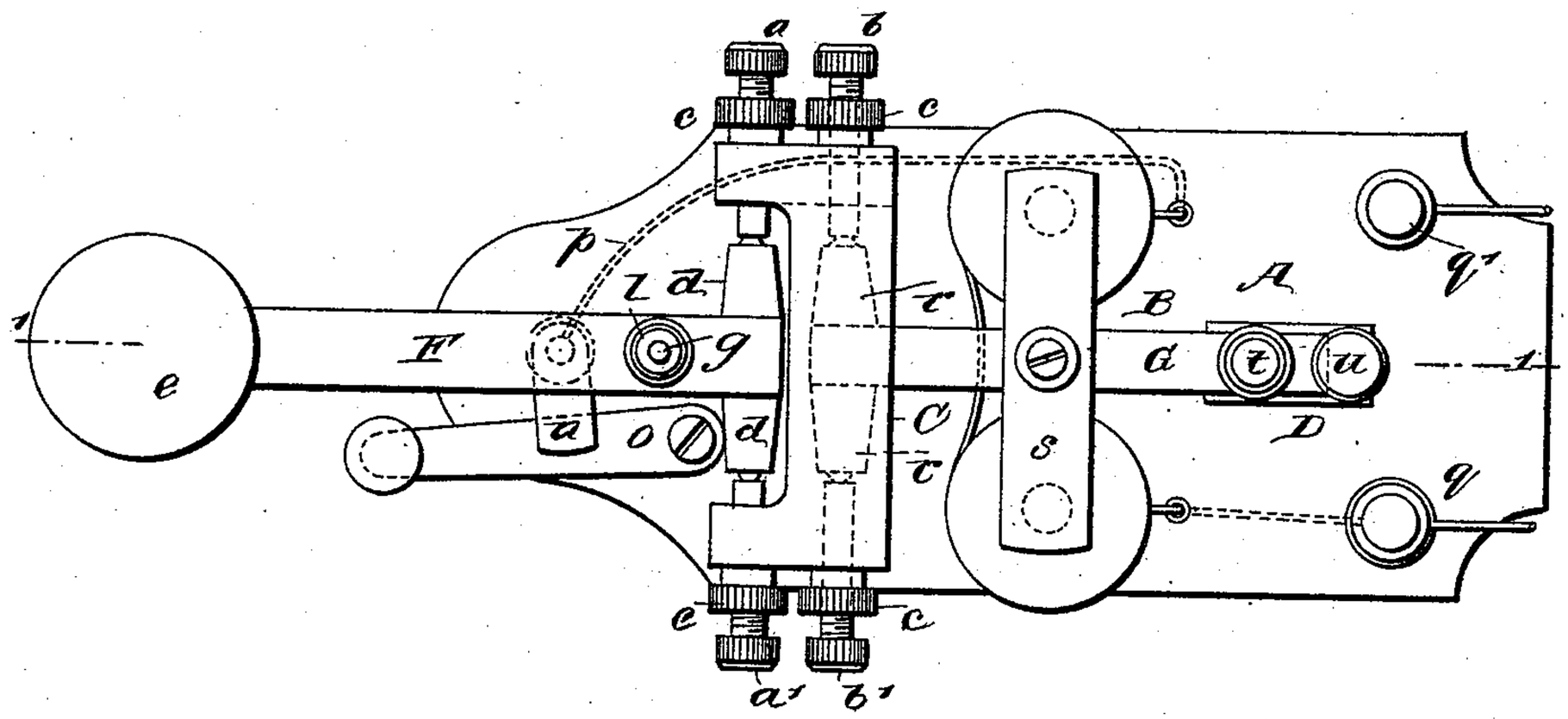



Fig 2




WITNESSES:

H. Walker

C. Sedgwick

INVENTOR

P. D. Cox

BY Munn & Co

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

PHILIP DARIUS COX, OF JASPER, FLORIDA.

## COMBINED TELEGRAPH KEY AND SOUNDER.

SPECIFICATION forming part of Letters Patent No. 526,965, dated October 2, 1894.

Application filed January 9, 1894. Serial No. 496,226. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP DARIUS COX, of Jasper, in the county of Hamilton and State of Florida, have invented a new and Improved Combined Telegraph Key and Sounder, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a vertical longitudinal section of my improved key and sounder, on the line 1—1 in Fig. 2; and Fig. 2 is a plan view of the same.

Similar letters of reference indicate corresponding parts in both views.

My invention relates to improvements in combined telegraph keys and sounders, and the invention consists in the particular construction and arrangement of parts as hereinafter described and pointed out in the claim.

To the base A are attached the sounder magnet B, the yoke of which is let into the base, the standard C, the L-shaped post D and the anvil contact E. The base A is preferably made hollow, as shown, to admit of making the electrical connections of the instrument underneath the base. The standard C is made in the form of an arch, with screws *a a'* entering the lower part of the standard and screws *b b'* entering the upper part of the standard. These screws are provided with conical holes in the inner ends, and are furnished with jam nuts *c*, by which they are clamped to avoid accidental loosening.

In the conical holes in the inner ends of the screws *a a'*, are journaled the trunnions *d* of the key F. The key is provided with the usual button *e* and a contact point *f*, and it is apertured to receive the stud *g* screwed into the base A. On the threaded lower end of the stud *g* above the base, is placed a nut *i* on which rests a spiral spring *j*, the upper end of which is received in a cavity in the under side of the key F, and presses against the key. On the threaded upper end of the stud *g* are placed nuts *k*, *l*, the nut *k* serving to adjust the lift of the key F, while the nut *l* acts as a jam nut to prevent accidental loosening of the nut *k*.

The anvil contact E passes through insulation *m* inserted in the base A, and between the upper side of the insulation and the contact is clamped the circuit-closing contact *n*, and to the base A is pivoted the circuit-closing lever *o* which is capable of touching the contact *n* as it is swung around toward the anvil contact E. The anvil contact is connected with one terminal of the magnet B by the wire *p*, while the other terminal of the magnet is connected electrically with the binding post *q*, connected with the base A but electrically insulated therefrom. To the opposite side of the base is attached the binding post *q'*.

In the conically bored end of the screws *b b'* are journaled the trunnions *r* of the right angled armature lever G, which carries the armature *s* and is provided with the adjusting screw *t*, at a point near its free end, the said adjusting screw being arranged to strike the top of the post D, thereby limiting the downward movement of the lever G. In the right angled post D is inserted a screw *u*, the head of which projects over the lever G and limits the upward movement of the said lever. The shorter arm *v* of the lever G, which projects downwardly, receives one end of the spiral spring *w*, the other end of which is attached to the adjusting screw *c'* which passes through the post D and receives the adjusting nut *d'*.

The key and sounder is placed in the circuit by inserting wires in the binding posts *q q'*, and it is operated in the usual way.

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

The combination, with the base A and key F, of the threaded stud *g* inserted in the said base, and extending through a hole in the key, nuts *i*, *k* placed on the stud, and a spring *j* resting on the nut *i* and pressing the under surface of the key, substantially as specified.

PHILIP DARIUS COX.

Witnesses:
JOHN M. GUILLIAMS,
C. N. FLETCHER.