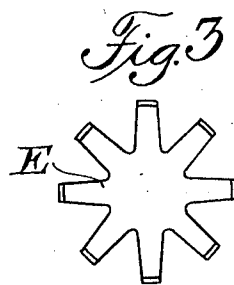
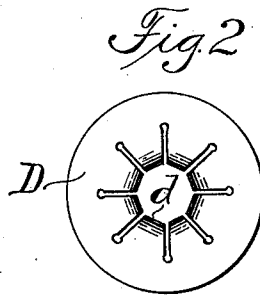
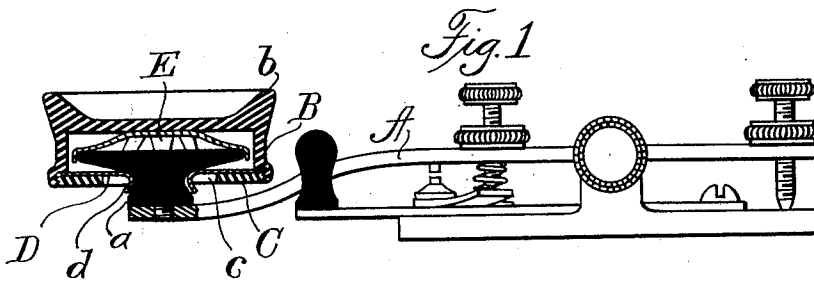


H. A. KELTY.
TELEGRAPHER'S KEY BUTTON CUSHION.
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1,058,598.

Patented Apr. 8, 1913.



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TELEGRAPHER'S KEY-BUTTON CUSHION.

1,058,598.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HARRY A. KELTY, citizen of the United States, residing at New Castle, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in Telegraphers' Key-Button Cushions, of which the following is a specification.

This invention relates to telegraphers' key-button cushions, and belongs to that class of devices intended to be applied to telegraph keys to cushion the usually hard button, in order that the fingers of the operator may encounter a relatively yielding surface. The general purpose of such cushions is to prevent the fingers from being unduly fatigued, and to render them less liable to the well known ailment termed "operators' cramp."

The object of this invention is the production of a key-button cushion having parts of special construction and particular arrangement with relation to each other, whereby it is believed, in addition to affording protection against operators' cramp by reason of its yielding structure and the fact that the fingers may assume numerous different positions upon it, the pressure of the fingers is equalized and a good, firm contact of the platinum points of the key is readily made by a "sending" operator.

This invention is set forth in the accompanying drawings, of which—

Figure 1 represents a side view of a key having this invention, shown in section, applied thereto. Fig. 2 is a top plan view of the spring diaphragm or disk. Fig. 3 is a bottom plan view of the spider spring.

In all the figures and throughout the description the same letter is used to refer to the same part.

A telegrapher's key A has the removable hard rubber button *a*, all of customary construction and operation. Over the button *a* in Fig. 1 is shown a hollow cap or hood B, in practice usually fashioned with a raised rim *b* which gives to the top of the cap a dished form. The cap B is provided at the bottom with a disk C having a central opening *c*. The cap B and the disk closure C are ordinarily made of rubber material which may be either hard or possess some yielding quality. The dished top construction is an advantageous feature of this invention, as it has been found in practice to be peculiarly adapted to avoid and relieve fatigue in sending, by reason of the many

changes in position that the fingers may assume.

It will be noted in Fig. 1 that the disk C has a threaded engagement with the lower inner portion of cap B, and between the disk and cap is clamped the spring diaphragm D which is constructed with a yielding open central portion designated by the letter *d*. The diaphragm D is below the button *a* of the key, and the cap B is supported upon the button *a* by means of a spider spring E.

In assembling the parts of this invention, the various members of this invention are separated and the button *a* unscrewed from the key stem. The neck of the key-button is now pressed through the yielding central open portion *d* of the diaphragm D, and then the neck of the key-button is passed through the central opening *c* of the disk C. Next, the spider spring is placed upon the top of the key-button, and the cap B arranged over all, and disk C screwed in place thus securing all the parts. The key-button may now be screwed upon the stem of key A in its former position.

When the fingers of the operator are pressed upon the cupped top of cap B, the spider spring E equalizes the pressure over the top of the key-button yieldingly, and the further downward pressure causes the opening *d* of diaphragm D to come into contact with the neck of the key-button *a*, and a good, firm contact of the platinum points results without constant and special effort on the part of the sending operator.

Having now described this invention and explained the mode of its operation, what I claim is:—

1. In a key cushion, the combination with a cap constructed to cover a key button, of a spring diaphragm having an open yielding central portion constructed to receive the neck of a key button, and means constructed to secure the said diaphragm and cap together upon a key-button.

2. In a key cushion, the combination with a cap constructed to cover a key-button, of an equalizing spring constructed to support said cap upon a key-button, a spring diaphragm having an open yielding central portion constructed to receive the neck of a key-button, and means constructed to secure the said spring and diaphragm and said cap together upon a key-button.

3. In a key cushion, the combination with

a cap having a dished top and constructed to cover a key-button, of means constructed to support and to secure said cap yieldingly upon a key-button.

- 5 4. In a key cushion, the combination with a cap arranged to be grasped by the fingers, of a member attached to the key and having a neck, a spring diaphragm provided with a central portion constructed to engage the

neck of said member, and means constructed 10 to secure the cap and the spring diaphragm together upon said member.

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

HARRY A. KELTY.

Witnesses:

E. F. G. HARPER,

S. JAMES CALLAHAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
