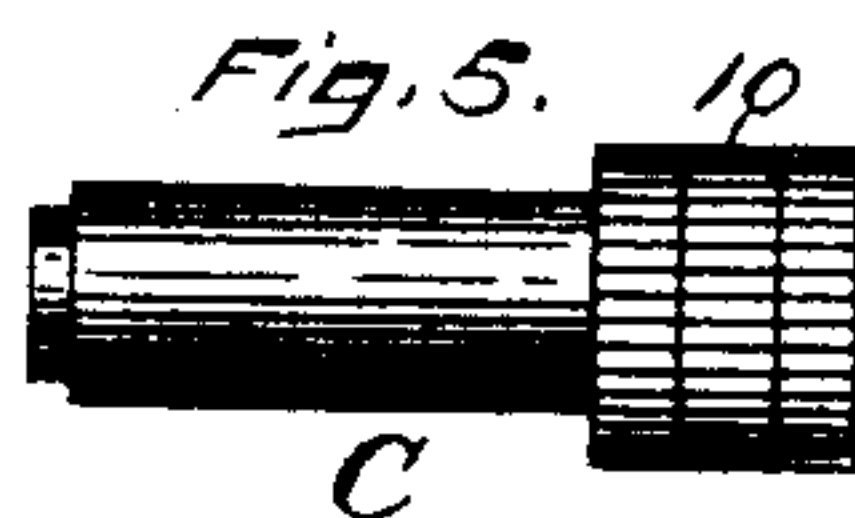
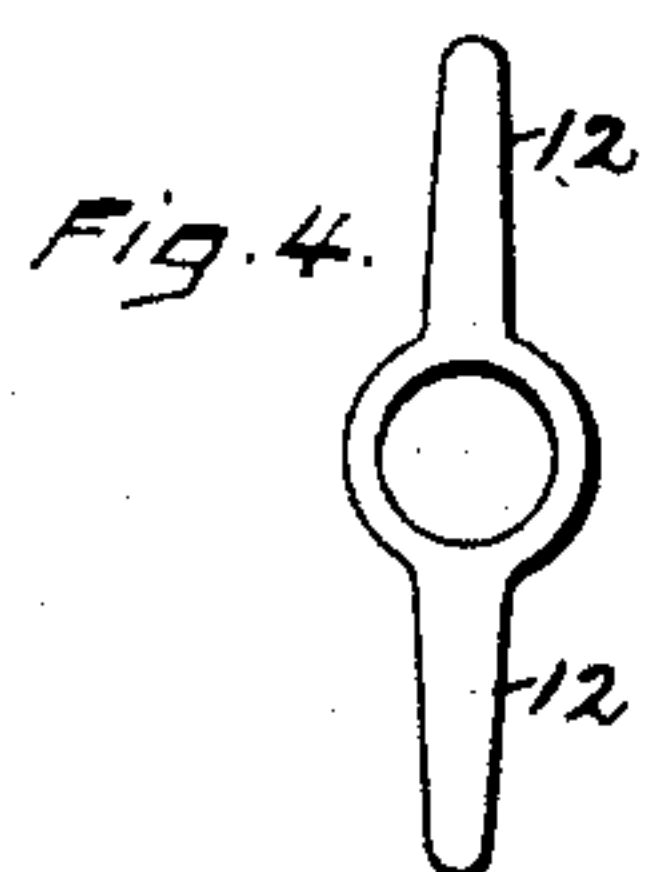
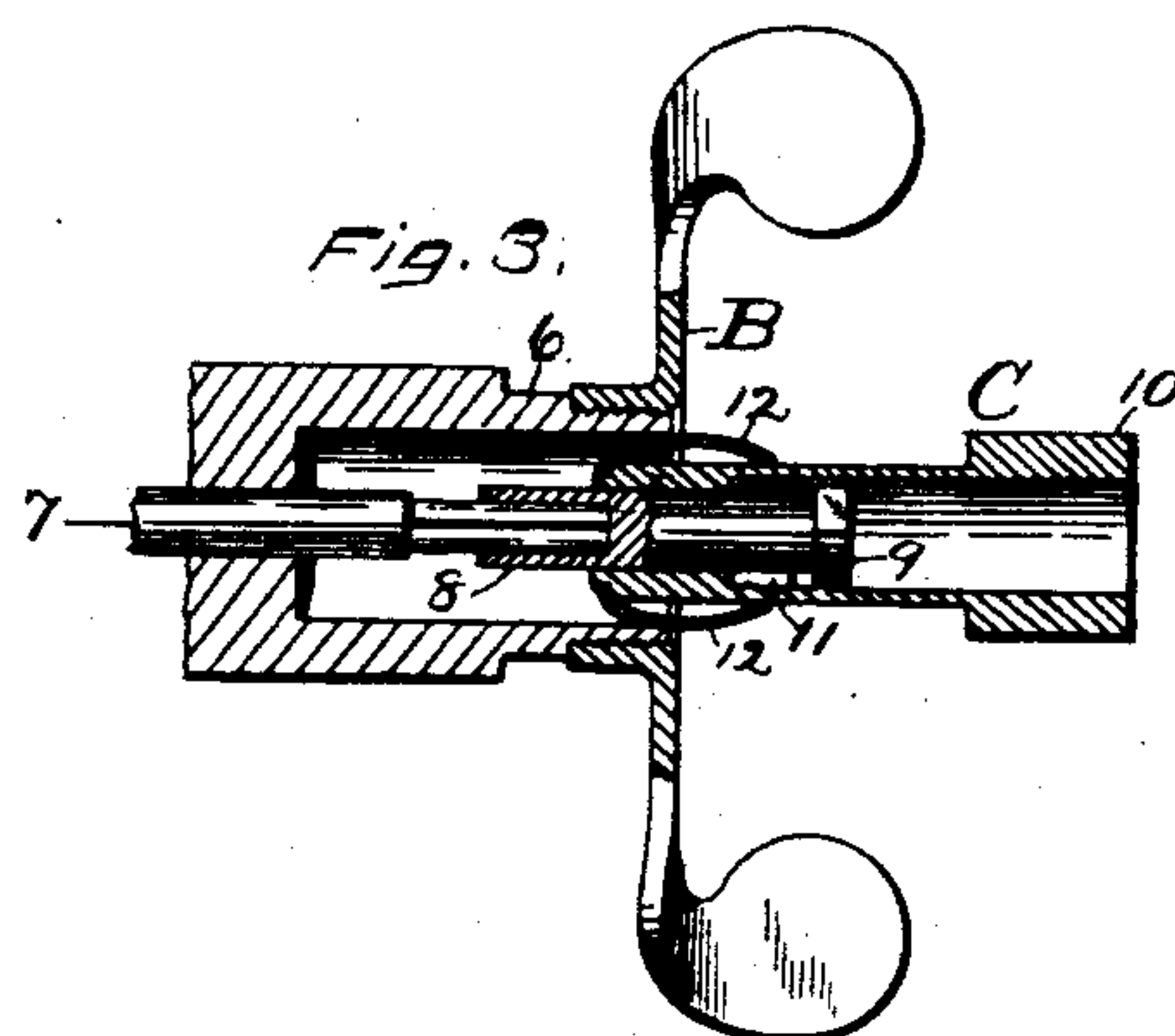
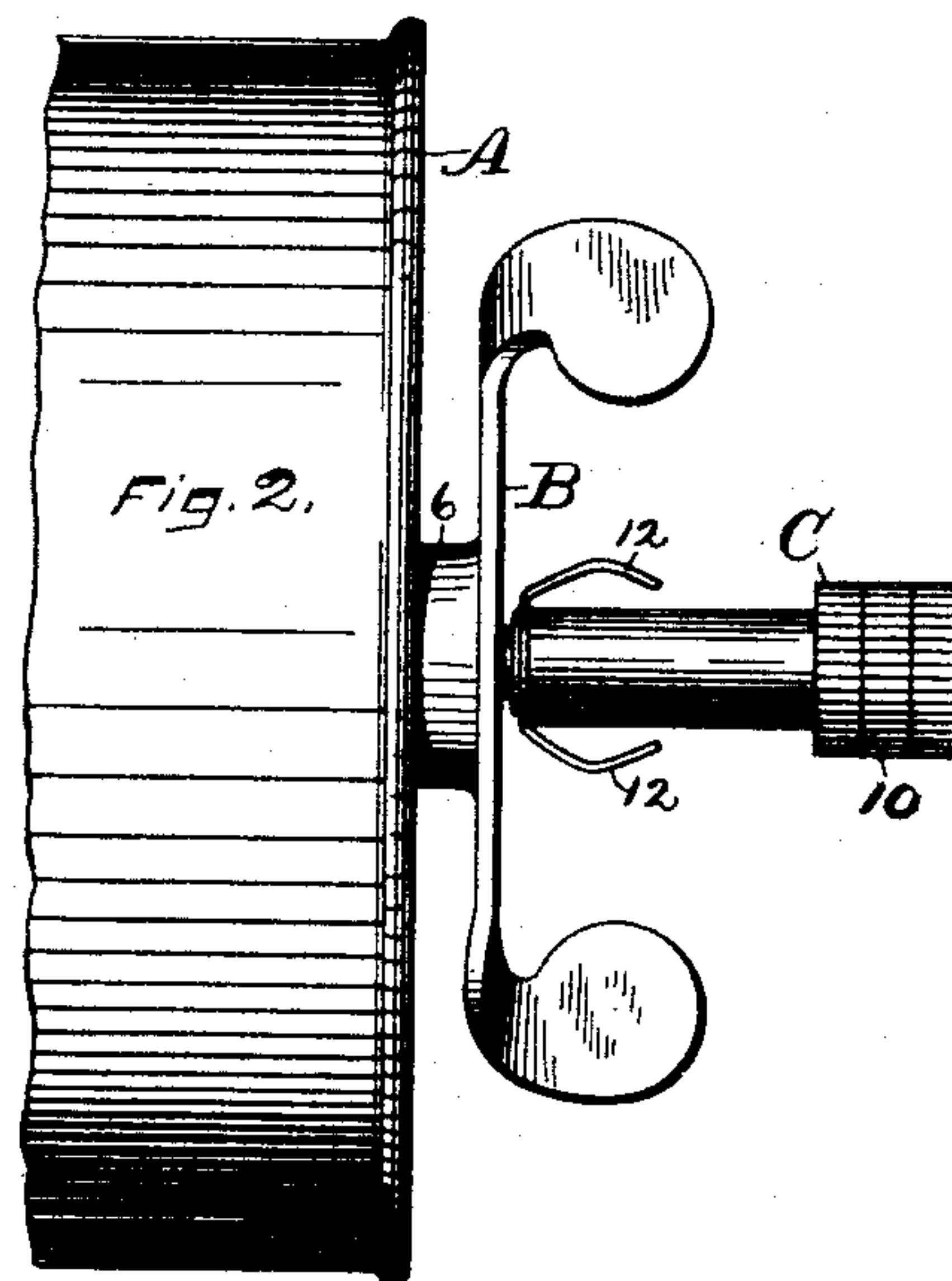
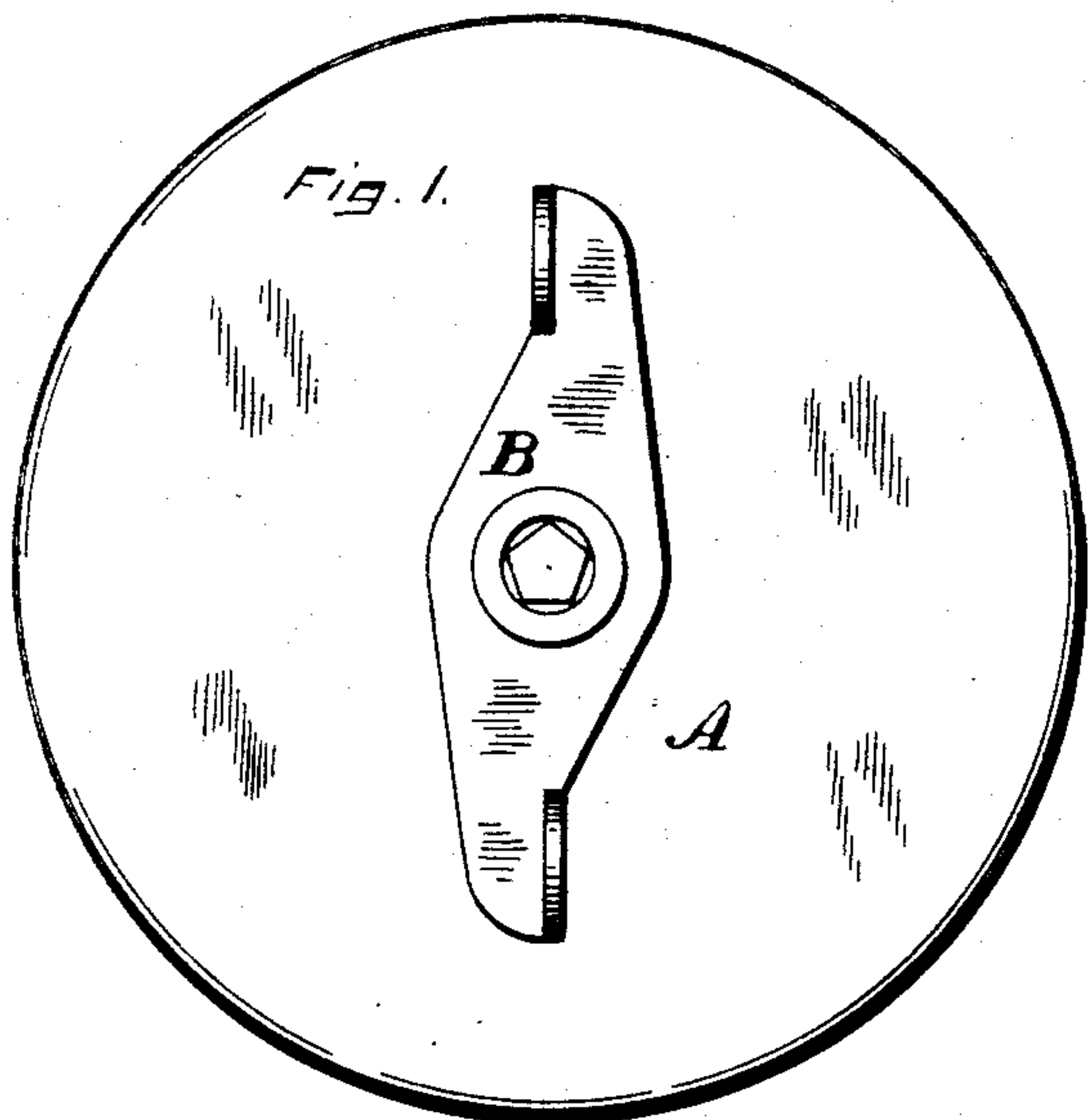


(No Model.)

A. M. LANE.
CLOCK KEY.

No. 436,921.

Patented Sept. 23, 1890.



Witnesses.
John Edwards Jr.
W. H. Pierce

Inventor,
Almon M. Lane.
By James Shepard
A.H.H.

UNITED STATES PATENT OFFICE.

ALMERON M. LANE, OF MERIDEN, CONNECTICUT.

CLOCK-KEY.

SPECIFICATION forming part of Letters Patent No. 436,921, dated September 23, 1890.

Application filed April 21, 1890. Serial No. 348,847. (No model.)

To all whom it may concern:

Be it known that I, ALMERON M. LANE, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Clock-Keys, of which the following is a specification.

My invention relates to improvements in clock-keys; and the object of my improvement is to increase the utility and convenience of the article, and particularly to provide a sliding key for setting the pointers, which will rotate freely except when drawn outwardly into position for use.

In the accompanying drawings, Figure 1 is a rear view of a clock-case with my pointer-setting key attached. Fig. 2 is a side elevation of the same, the key being drawn out for turning the pointers. Fig. 3 is a sectional view, partly in elevation, of detached parts. Fig. 4 is a plan view of the blank for forming the friction spring-arms, and Fig. 5 is a detached side elevation of the key prior to attaching said spring-arms.

A designates the back of a clock-case, through the center of which projects the central hub 6 of the mainspring, to which hub the winding-key B is attached. This central hub has a central opening at its outer end, into which the center shaft 7, that carries the pointers, as in ordinary clocks, projects. The central hub 6 is connected with the clock-spring substantially as in Patent No. 221,310, granted to A. E. Hotchkiss November 4, 1879.

Rigidly mounted upon the rear end of the center shaft is an extension 8, having a squared head 9 with four sides, or of some other angular or eccentric form that would constitute the equivalent of a square, for the purpose of applying a winding-key. This extension 8 is centrally bored at its inner end and driven upon the rear end of the center shaft 7 with sufficient force to make it stay in place and to make it and the center shaft rotate together. Any mechanic will readily know how to so secure the extension 8.

C designates the pointer-setting key, which in the main is of a cylindrical form adapted to enter the recess or opening in the central hub 6, and provided at its outer end with a suitable handle 10 for convenience of manipu-

lation. The inner end of this key C is bored to fit the cylindrical body of the extension 8, as shown in Fig. 3, while its outer end has a bore of a larger diameter that will permit the head 9 to revolve therein. At the junction of the smaller and larger bore of the key C there is a squared socket 11, which substantially fits the head 9, and into which said head may be received. When the key C is pushed inwardly, as illustrated in Fig. 3, far enough so that the head 9 is disengaged from the squared socket 11, or when pushed in to any point beyond the position so illustrated the key is free to turn upon the extension of the center shaft while said shaft remains stationary, and therefore if the key C for setting the pointers should be accidentally hit and partially revolved when not fully withdrawn its partial revolution will not change the position of the pointers. By fully withdrawing the pointer-setting key, as shown in Fig. 2, the head 9 enters the squared socket 11 and necessitates the revolution of the extension 8 and center shaft 7 with the key C, so that the pointers may be turned to any desired position.

In order to hold the pointer-setting key within the case out of the way when not wanted for use, I provide the same with friction spring-arms 12, which may be attached to said key in any suitable manner and bear upon the central bore in the hub 6, as shown. I prefer to attach these arms by forming them from a blank shaped as shown in plan view in Fig. 4, with a central opening, and to form a tenon upon the inner end of the key C, upon which to rigidly secure the spring-arms by upsetting or "staking" and then bend the arms, as shown in Figs. 2 and 3.

While I have illustrated my improvement with the pointer-setting key and winding-key concentrically mounted as the preferred form, I do not wish to confine all features of my invention to such an arrangement, as it is evident that my pointer-setting key may be used to great advantage in any clock where the winding and pointer-setting devices are located so near to each other as to be crowded and have the setting device liable to be accidentally turned by one's fingers when operating the winding-key, whether said winding

and pointer-setting keys are arranged side by side or concentrically.

I claim as my invention—

1. A pointer-setting key C, having a bore at
5 its inner end adapted to fit and slide upon a center-shaft extension, a larger bore at its outer end, and a key-socket between said two bores, adapted to receive a head on the extension for turning the same, and adapted to
10 revolve independently on said extension when said socket and head are disengaged, substantially as described, and for the purpose specified.

2. The combination of the center shaft and
15 headed extension, with the sliding key C arranged thereon and provided with an inter-

nal socket 11 for engaging said head when the key is withdrawn and adapted to be disengaged therefrom when the key is pushed in, substantially as described, and for the purpose 20 specified.

3. The combination of the central hub 6, provided with a central bore at its outer end, the center-shaft extension, the sliding key C, mounted thereon, and the spring-arms 12, for 25 engaging the bore of said central hub, substantially as described, and for the purpose specified.

ALMERON M. LANE.

Witnesses:

JAMES SHEPARD,
JOHN EDWARDS, Jr.