

Oct. 9, 1923.

J. W. BRYCE ET AL

1,469,988

RECORDER

Filed Aug. 11, 1922

2 Sheets-Sheet 1

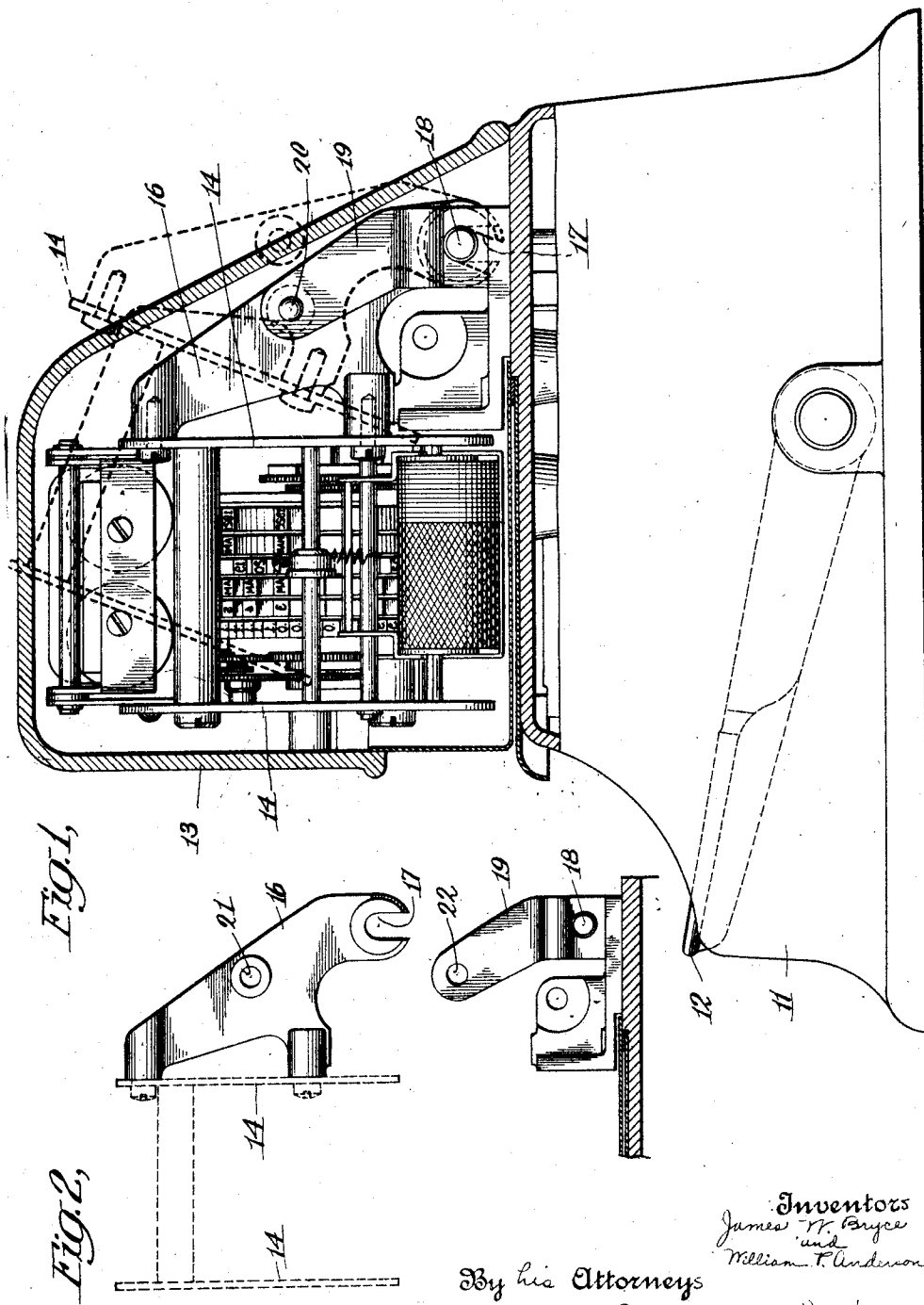


FIG. 1,

FIG. 2,

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and
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By his Attorneys

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Fig. 3

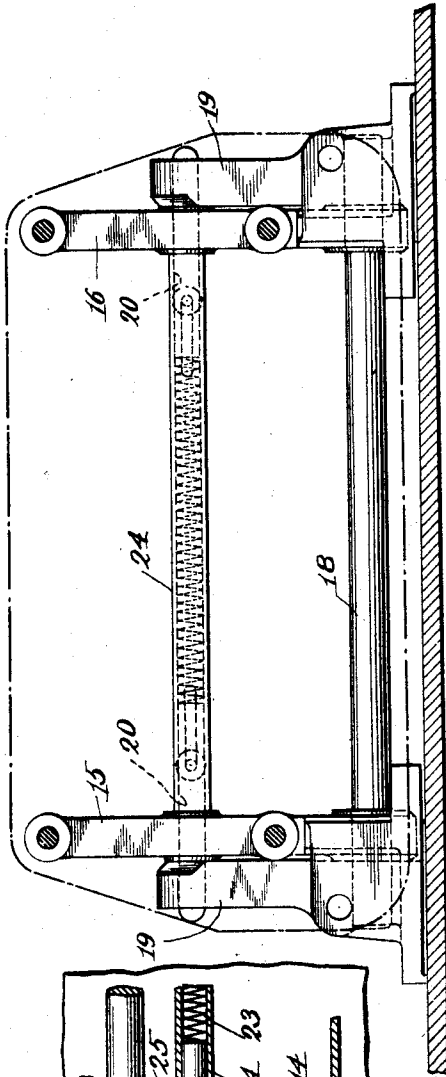


Fig. 5,

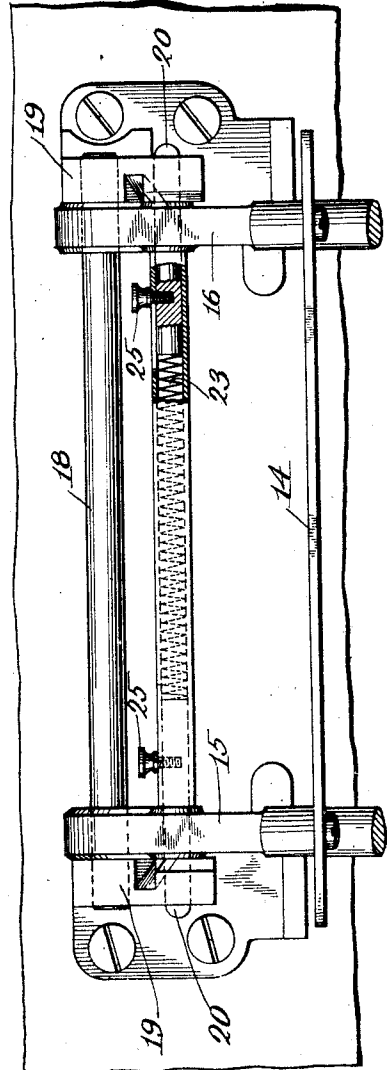
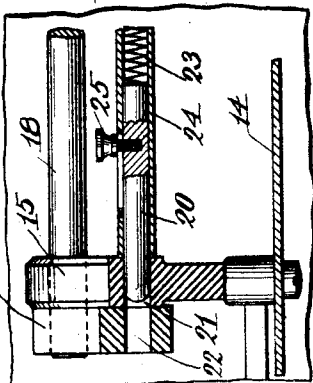


Fig. 4,

By his

Attorneys

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William P. Anderson
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UNITED STATES PATENT OFFICE.

JAMES W. BRYCE, OF BLOOMFIELD, AND WILLIAM P. ANDERSON, OF BOGOTA, NEW JERSEY, ASSIGNORS TO INTERNATIONAL TIME RECORDING COMPANY, OF ENDCOTT, NEW YORK, A CORPORATION OF NEW YORK.

RECORDER.

Application filed August 11, 1922. Serial No. 581,059.

To all whom it may concern:

Be it known that we, JAMES W. BRYCE and WILLIAM P. ANDERSON, both citizens of the United States of America, residing, respectively, at Bloomfield, in the county of Essex, and Bogota, in the county of Bergen, State of New Jersey, have invented certain new and useful Improvements in Recorders, of which the following is a full, clear, and exact description.

This invention relates to improvements in recorders, and is more particularly directed to a printing head which is readily removable as a whole from the machine.

In the time recorder art, the machine usually comprised a group of type wheels and associated therewith are the usual gears, pulsing magnet, and other appurtenances which effect the proper positioning of the type. Suitable inking devices are likewise provided which may be in the form of an inking pad or an ink ribbon.

These parts are usually mounted in a housing which carries the printing platen and like parts. When these recorders are in use in the field, it is occasionally necessary to inspect the mechanism to clean the type or re-ink the inking pad, or replace a worn inking ribbon. Occasionally it is necessary to make certain slight repairs or adjustments or to replace the entire printing head.

Experience has demonstrated that greater attention must be given to the printing head proper, and that the other parts such as platen and the operating devices therefor require practically no inspection.

The present improvement is directed to the provision of an improved head and an improved mounting therefor, so that the entire head assembly may be either readily displaced to accessible position for cleaning and repair, or the head may be removed entirely and replaced with a new head.

In the drawings,
Fig. 1 is a sectional view of a typical recorder having the improved head and mounting applied thereto.

Fig. 2 shows the head frame removed from its mounting.

Figs. 3, 4 and 5 show details of the locking bolt construction.

The recorder to which the present invention is shown applied is the cost recorder

shown in the patent to Larrabee, No. 1,299,197. It will be obvious that it is equally applicable to other types of machines.

The recorder proper comprises a supporting base housing 11, carrying the platen actuating handle 12. Removably supported upon the base is a cover 13 within which the printing head is mounted. The specific details of construction of this head are described in the patent above referred to. It is sufficient to state that the parts are mounted upon side plates 14. To one of these plates there are connected two supporting brackets 15, 16, one of which is shown in Fig. 2. This bracket at its lower end is slotted at 17 to fit over a shaft 18 which is fixedly supported upon fixed brackets 19. These latter brackets are secured to the supporting base of the machine.

To lock the head in position, locking plungers 20 are provided which plungers are adapted to pass through holes 21 in the head brackets and through holes 22 in the fixed brackets. Preferably these plungers are spring pressed outwardly by spring 23 and are carried within a tube 24 (see Fig. 5). To effect the retraction of the locking plungers knobs 25 are provided which extend through suitable slots in the tube 24.

Removal of the cover affords ready access to the knobs 25. After these are retracted and the plungers withdrawn, the entire head assembly may be swung to the dotted line position (Fig. 1) for cleaning or repair. If replacement of the entire head is desired, the open ended slots 17 permit the entire head assembly, including the brackets, to be removed and replaced.

The locking plungers when in locking position hold the head securely in place and in proper relation to the printing platen and other associated mechanism.

Adjustment or removal of the head may be effected quickly without the use of any tools and it is unnecessary for the repair man to remove screws or like parts which were heretofore more or less inaccessible.

What we claim is—

1. A recording machine comprising in combination, a printing head and a detachable mounting therefor with provisions for permitting the swinging of the recorder

head for inspection or the removal of the same as a unit from the machine.

2. A recording machine comprising a supporting base, a printing head pivotally mounted upon the base, and locking means associated with said base and head adapted to prevent the tipping of the head when the machine is in use.

3. A recording machine, comprising a supporting base, a printing head removably mounted thereon, and manually retractable plunger means for locking the head in position and in fixed relation to the base.

4. A recording machine comprising a support, a printing head removably mounted upon said support, and quickly releasable manually operable locking means for secur-

ing said head to said support and permitting the release of the same.

5. A recording machine comprising a supporting member, a pair of brackets fixed thereto, a recording head, a pair of brackets carried thereby, a supporting shaft carried by the fixed brackets, said head brackets having elongated slots to engage said shaft, registering apertures in the fixed and head brackets, and locking plunger means cooperating therewith to secure the head against movement or to permit the displacement or removal of same.

In testimony whereof we hereto affix our signatures.

JAMES W. BRYCE.
WILLIAM P. ANDERSON.