No. 784,789. PATENTED MAR. 14, 1905.

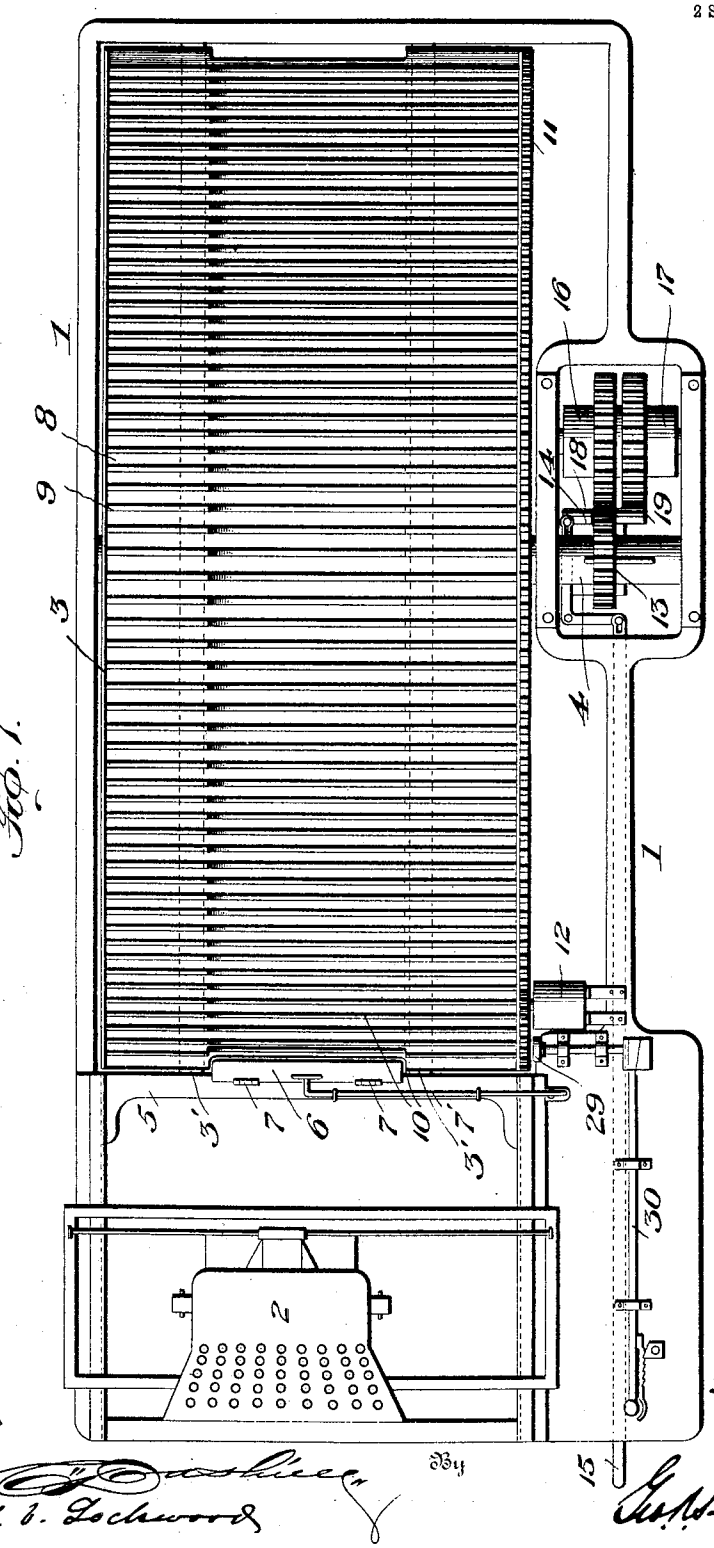
H. C. HARTLEY.

CLASSIFYING SHEET HOLDER FOR TYPE WRITERS.

APPLICATION FILED OCT. 10, 1904.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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CLASSIFYING SHEET HOLDER FOR TYPE WRITERS.

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2 SHEETS—SHEET 2.

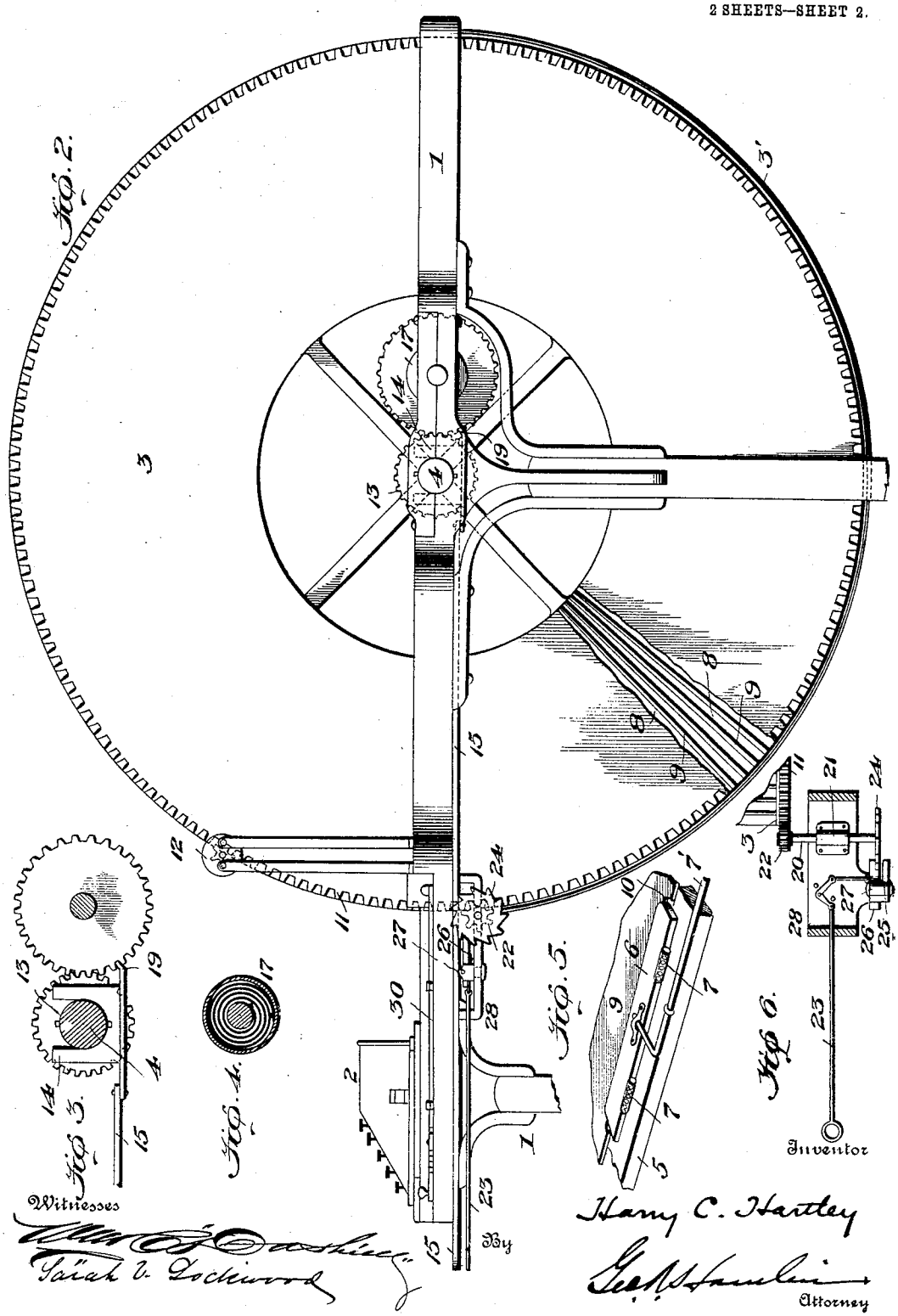


Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Witnesses

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PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 784,789. Patented March 14, 1905.

UNITED STATES PATENT OFFICE.

HARRY C. HARTLEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

CLASSIFYING SHEET-HOLDER FOR TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 784,789, dated March 14, 1905.

Application filed October 10, 1904. Serial No. 227,813.

To all whom it may concern:

Be it known that I, HARRY C. HARTLEY, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Classifying Sheet-Holders for Type-Writers, of which the following is a specification.

This invention relates to classifying sheet-holders, and is designed more particularly for use in connection with type-writers.

The object of my invention is the provision of an improved, simple, and comparatively inexpensive device for holding recording-sheets of any kind in any desired classification, and is more particularly designed for use in connection with type-writers, especially those commonly known as "book" type-writers, as a convenient means for holding different sheets of paper on which data or other matter is to be written or printed. Particularly in the keeping of audit-sheets in railway-offices and other places where data or information relating to a number of different subjects coming from various sources at different times has to be recorded on different single sheets according to classification it has been found slow and tedious work to finger a mass of different data or information sheets and recording-sheets in order to transfer all the matter relating to a given subject to a recording or classifying sheet and to effect transfers, and in the keeping of records in this manner much valuable time is wasted. In the main office of a railroad, for instance, classified monthly records have to be kept of the way-bills representing shipments from any given originating-point to all other points on the same railway system. Assuming, for instance, the recording clerk at the main office has before him for record a miscellaneous assortment of way-bills for the month of September, covering all shipments from a given station to all other stations, in recording he has to use different recording-sheets for data relating to different stations to which shipment has been made from the given originating-point. In other words, one recording-sheet will be used for the collection of data relating to all shipments between the originating-point and a given destination-point and another recording-sheet must be used for the aggregation of data relating to all shipments during September from the same originating-point to some other destination-point, and so on. If there were five hundred stations on the railway system, then in collecting data concerning shipments from a given station—say No. 1—as many recording-sheets would have to be used as there were stations to which shipments were made. The clerk, with a mass of way-bills before him, has to record them in the order of date of shipment, and, assuming he were recording all shipments from station No. 1, his first way-bill might cover shipment to station No. 15, the next way-bill cover shipment to station No. 439, the next to station No. 3, then to station No. 241, &c., so that he is repeatedly fingering his recording-sheets at great loss of time.

The present invention is designed more particularly to meet the requirement created by the aforementioned conditions by providing novel means for holding the recording-sheets in a regular classified arrangement, so that they can be rapidly and conveniently got at one at a time for recording the data from the way-bills thereon, and as the book type-writer is now in common use in railway-offices and other places the present invention is adapted for use with it.

In carrying out the invention I provide a rotary drum or wheel having pockets for holding independently the recording-sheets, said pockets having indicia identifying them with the recording-sheets, so that the desired sheet can be gotten at immediately and replaced after a given entry is made, conveniently arranged in connection with a book type-writer, together with novel means for rotating the drum in either direction at will, checking and locking it where desired, removing the desired sheet, and visibly registering the position of the pockets relatively to the sheet-removing device, so that the operator can quickly determine when the desired sheet is in position for removal for use in the type-writer, a convenient embodiment of the invention being set forth fully hereinafter and the novel features being recited in the appended claims.

It is to be understood that the rotary drum and its various adjuncts need not be used in connection with a type-writer, though this is the most practical and convenient embodiment of the invention, as the device may be used separately as a classifying-machine; nor is the use of the invention restricted to railway-work, as it may be used in any desired connection.

In the accompanying drawings, Figure 1 is a plan view; Fig. 2, a side elevation; Fig. 3, a detail of the shipper for the pinion of the drum; Fig. 4, a detail of one of the spring-motor drums; Fig. 5, a detail of the device for removing the recording-sheets from the drum; and Fig. 6, a detail of the escapement mechanism for the drum.

A frame 1 supports both the book type-writer 2, which is of any preferred form, and the drum 3, the latter being carried by an axle 4, suitably journaled in frame 1. Drum 3, which may be of any desired diameter, according to the size of the recording-sheets it is desired to hold, has its periphery revolving close to the bed or platen of the book type-writer 2, which is provided with a slide 5, movable horizontally over the bed, to which is hinged a gripper 6, the hinges 7 whereof are spring-actuated and tend to hold the gripper down. The gripper is raised and the slide 5 operated by a rod 7′, having a suitable handle. The drum 3 is divided into the desired number of radially-extending compartments 8 by radially-extending partitions 9, whose outer edges are notched at 10, the same shape and a trifle larger size than the gripper 6, it being understood that the recording-sheets, one only of which is located in a given compartment, lie on the partitions so that their outer edges overlap the space 10, being thus positioned to be gripped by the gripper 6. The compartments are numbered consecutively or bear any suitable indicia designating the recording-sheet contained therein, and the drum has a circular rack 11 geared to an indicator 12, which displays the number or indicia of the compartment located at the time opposite the gripper 6. The drum revolves close to semicircular guards 3′, which prevents the recording-sheets from falling out of their compartments.

Slidably keyed to axle 4 is a pinion 13, carried in a shipper 14, which is operated by a pull-rod 15, having bell-crank-lever connection with the shipper. Spring-motors 16 and 17, one adapted to turn the pinion 13 in one direction and the other to rotate said pinion in a reverse direction, are provided with exterior gear-teeth for independently engaging the pinion. These motors consist of gears having suitable independent winding mechanism and spiral springs actuating the gears in opposite directions. Any desired type of reversible motor, however actuated and connected to the drum, could be used in this connection, and spring-motors are not necessarily employed. The shipper has independent teeth 18 and 19, adapted, respectively, to lock the motor, which is not at the time engaged with the pinion, but leaving the operating-motor free to turn the pinion, and hence the drum.

Coöperating with the rack 11 is an ordinary type of escapement mechanism, which may consist of a shaft 20, journaled in slidable bearings 21 and carrying a pinion 22, adapted to mesh with rack 11 or be thrown out of mesh therewith to permit free rotation of the drum by pull-rod 23.

On the shaft 20 is a ratchet-wheel 24, with which the fixed pawl 25 and pivoted spring-actuated pawl 26, both carried by a rocking arm 27, are adapted to engage in alternation, brought about by the action of the rod 23 back and forth by the operator, whereby the drum may be permitted to rotate step by step in the desired manner and in a well-known way.

It is desirable to use a brake 29, operated by a pull-rod 30, to check the rotation of the drum prior to locking it and spacing it to bring the desired compartment in position adjacent gripper 6 when the drum has been previously allowed to rotate freely.

The compartments of the drum have initially placed therein the various recording-sheets, one sheet to a compartment. The operator, seated in front of the type-writer, then shifts the pinion to cause the drum to rotate in the desired direction to most quickly bring the proper compartment in line with the gripper. If the desired compartment is on the far side of the drum, he may free the drum and let the motor in use turn it quickly and then check the drum and space it step by step until the compartment is opposite the gripper. If the compartment desired is near the gripper, the escapement mechanism alone may be used. The indicator shows at a glance in which direction and how far the drum will have to be rotated, and the operator acts accordingly, throwing one or the other motor in gear, releasing the drum, or spacing it, &c. After the compartment desired has been located opposite the gripper, the latter is operated to withdraw the recording-sheet from the compartment and locate it on the type-writer platen or bed ready for type-writing thereon the desired data from the uppermost way-bill of the pile which lies conveniently to the operator. The slide and gripper are then returned, thereby depositing the recording-sheet in its compartment, and the gripper is then released and the drum rotated or spaced again for the removal of the recording-sheet next desired for use in the type-writer and the operation repeated. These operations are carried on until the data of the entire pile of way-bills have been transferred to the various recording-sheets.

The type of motor, escapement, brake, and

other features can be varied as found desirable; nor is the invention restricted to the use of the drum in connection with a book type-writer, as it could be used separately therefrom as a classifying medium, and I therefore do not limit myself to the use of the specific features herein set forth in carrying out the invention.

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

1. In a device of the character set forth, a rotary drum having a plurality of independent devices for independently removably holding a plurality of recording-sheets, in combination with a type-writer positioned relatively to the drum for the delivery of the sheets from the drum to the type-writer platen.

2. In a device of the character set forth, a rotary drum having a plurality of independent devices for independently removably holding a plurality of recording-sheets, in combination with a book type-writer having its flat bed or platen positioned relatively to the drum for the delivery of the sheets from the drum to the said platen.

3. In a device of the character set forth, a rotary drum having a plurality of compartments for independently removably holding a plurality of recording-sheets, in combination with a book type-writer having its flat bed or platen positioned relatively to the drum for the delivery of the sheets from the drum to the said platen, and a carriage movable over the said bed or platen having means to engage the sheet and remove it from a compartment.

4. In a device of the character set forth, a rotary drum having a plurality of independent devices for independently removably holding a plurality of recording-sheets, and a motor and reversing mechanism therefor for revolving the drum in either direction.

5. In a device of the character set forth, a rotary drum having a plurality of independent devices for independently removably holding a plurality of recording-sheets, independent motors for driving the drum independently in opposite directions, and means controlling said motors.

6. In a device of the character set forth, a rotary drum having a plurality of independent devices for independently removably holding a plurality of recording-sheets, a motor for revolving the drum, and means for checking the revolution of the drum at any time to position any given sheet carried thereby at any desired point.

7. In a device of the character set forth, a rotary drum having a plurality of independent devices for independently removably holding a plurality of recording-sheets, a motor for revolving the drum, a platen or bed located adjacent the drum, and means for checking the drum to position any given sheet carried by the drum adjacent the bed or platen so that said sheet may be positioned on the bed or platen.

8. In a device of the character set forth, a rotary drum having a plurality of independent devices for independently removably holding a plurality of recording-sheets, a motor for revolving the drum, a type-writer having a bed or platen located adjacent the drum, and means for checking the drum to position any given sheet carried by the drum adjacent the bed or platen so that the said sheet may be positioned on the bed or platen to be type-written on.

9. In a device of the character set forth, a rotary drum having a plurality of independent devices for independently removably holding a plurality of recording-sheets, a motor for revolving the drum, a platen or bed located adjacent the drum, means for checking the drum to position any given sheet carried by the drum adjacent the bed or platen so that said sheet may be positioned on the bed or platen, and an indicator operated by the drum.

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

HARRY C. HARTLEY.

Witnesses:

SARAH V. LOCKWOOD,

E. EDMONSTON, Jr.