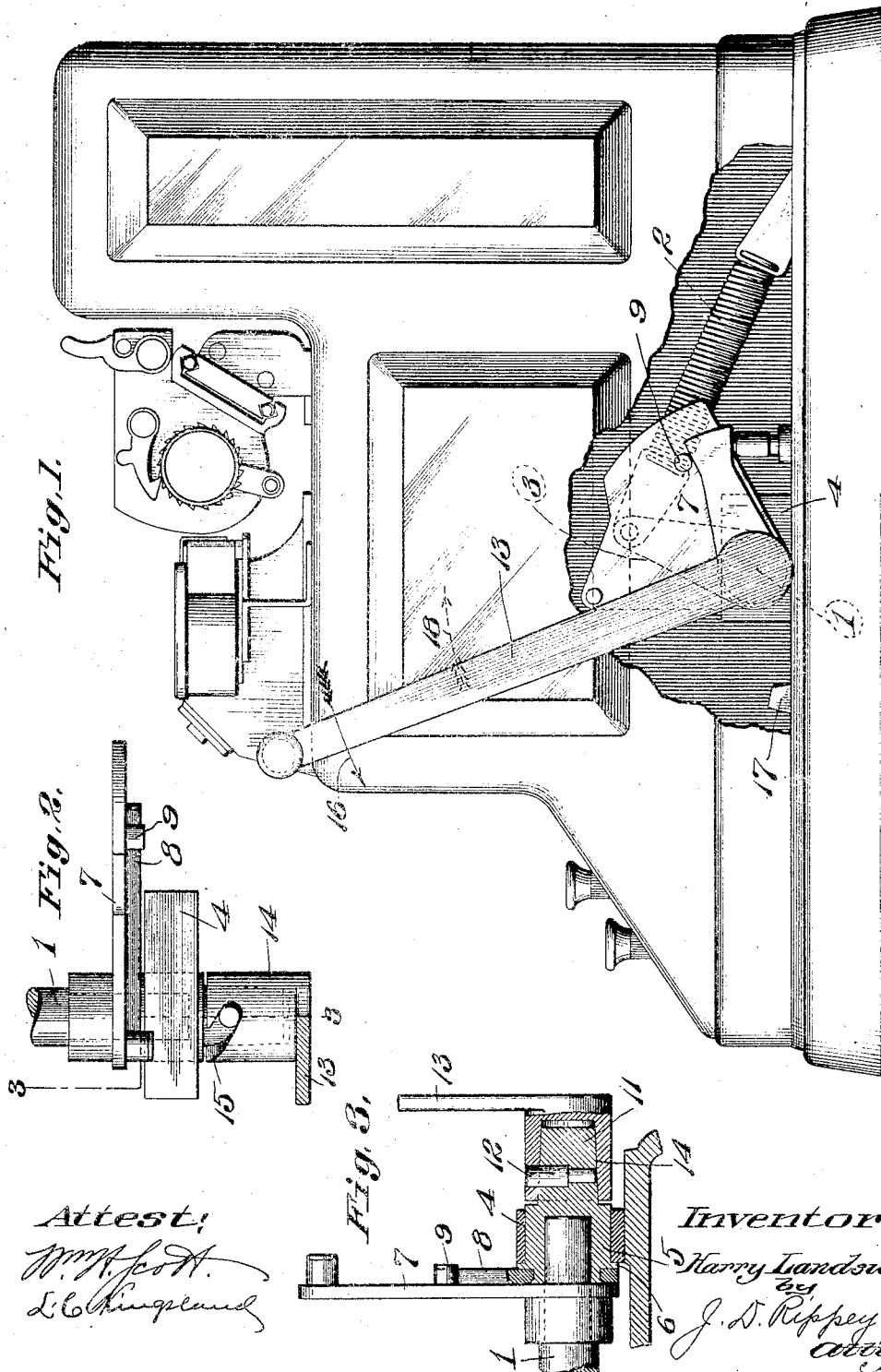


H. LANDSIEDEL.
 ADDING AND RECORDING MACHINE.
 APPLICATION FILED JUNE 15, 1912.

1,078,359.

Patented Nov. 11, 1913.



UNITED STATES PATENT OFFICE.

HARRY LANDSIEDEL, OF POPLAR BLUFF, MISSOURI, ASSIGNOR TO DALTON ADDING MACHINE COMPANY, OF ST. LOUIS, MISSOURI. A CORPORATION OF MISSOURI.

ADDING AND RECORDING MACHINL.

1,078,359.

Specification of Letters Patent.

Patented Nov. 11, 1913.

Application filed June 15, 1912. Serial No. 703,783.

To all whom it may concern:

Be it known that I, HARRY LANDSIEDEL, a citizen of the United States, residing at Poplar Bluff, in the county of Butler and State of Missouri, have invented new and useful Improvements in Adding and Recording Machines, of which the following is a specification enabling those skilled in the art to which my invention appertains to understand the same.

This invention relates to adding machines in which there is a main shaft, which shaft in a sense performs the functions of an operating shaft, in that the operation of the shaft enables, or causes, or permits the machine and the combined mechanisms thereof to perform their respective and combined functions and duties. This shaft may be referred to also as a rock shaft, since it is usually operated in rocking movements.

An object of the invention is to provide an improved combination of elements for operating the shaft.

Another object is to provide an improved connection between an operating handle and the shaft.

A further object is to provide a novel and improved means for holding the shaft and handle in connection with each other whereby the handle is operative effectively to rock the shaft in one direction but is releasable from the shaft when moved in the opposite direction.

An additional object is to provide a novel combination of operating elements comprising a support in the form of a bushing or hub for the shaft, engaging elements on the shaft and on the bushing or hub, respectively, whereby a rocking movement of the bushing or hub will rock the shaft in one direction, leaving the said bushing or hub free to return independently and in advance of the shaft, and a handle provided with improved means of connection with the bushing or hub for rocking the said bushing or hub as aforesaid.

Other objects and advantages to be derived from my invention will be apparent to those skilled in the art to which the invention relates without specific mention thereof.

Said objects and advantages will appear from the following description, reference being made to the accompanying drawings in which I have shown one embodiment of my

invention in combination with a well known adding machine, and in which—

Figure 1 is a side elevation of a Dalton adding machine illustrating the handle and a part of the connections whereby the handle may rock the main operating rock shaft of the machine. Fig. 2 is a plan view of the combination of elements constituting the subject-matter of my present invention. Fig. 3 is a view partially in section on a line 3—3 of Fig. 2.

While I have shown my invention embodied in and combined with a Dalton adding machine, it will be apparent that it is equally as well applicable to any adding machine employing a main operating rock shaft. I do not restrict my invention to any particular or specific type of adding machine.

The Dalton adding machine is manufactured within the scope of Hopkins Patent No. 1,039,130, dated September 24, 1913, and is a substantial embodiment of the adding and listing mechanism in said patent.

Within the machine there is a shaft 1, which has heretofore been referred to as the main operating rock shaft of the machine. The shaft 1 is mounted in a substantially horizontal position in the machine and its operation is necessary in order to permit the machine, and the various combined mechanisms thereof, to perform their several and joint functions. The shaft 1 is a rock shaft and is arranged to be rocked in one direction by one element and in the other direction to its idle or initial position by a spring 2, having one end connected to an arm 3 on the shaft, and the other end in connection with some stationary part of the machine.

Near one end of the shaft 1, which is adjacent to one side of the machine, is a fixed bearing 4 in which is revolubly mounted a member 5 which constitutes a hub or bushing in which the end of the shaft 1 is supported, as illustrated in Fig. 3. The hub or bushing 5 is held from outward movement by a flange 6 near its inner end, which engages against the bearing 4. The shaft 1 has an arm or plate 7 attached thereon and the hub or bushing 5 has an arm or lever 8 rigidly secured to its inner end close to the arm or plate 7. The said arm or plate 7 has a projection 9 on its outer side above and in the path of movement of the arm or lever 8, so that when the hub or bushing 110

5 is rocked forwardly the shaft 1 will also be rocked forwardly in opposition to the spring 2. After the shaft has performed its full forward stroke, or rocking movement, and is released, the said shaft is returned to its idle or initial position by the spring 2, and the hub or bushing 5 is also returned to its initial position, as will be clearly understood by reference to the drawings. Backward movement of the shaft is limited and stopped by an abutment 10 against the lever 8 alone, or the said lever or the arm 7 together about when in their idle or initial positions.

For manual operation of the rock shaft in opposition to the spring 2 a handle or lever is utilized, and is provided with a releasable connection for holding the same in engagement with the hub or bushing 5. The said hub or bushing 5 is provided with a tapering extension 11 which projects into or through an opening in the case of the machine to permit connection of the handle therewith while the case is in position. A pin 12 is rigid with the extension 11. The operating handle or lever 13 is formed integral or rigid with a hub or socket 14 in which there is a tapering bearing or opening arranged to receive the extension 11 as shown. The said hub or socket 14 has a slot 15 extending obliquely inwardly from the end of the hub or socket and arranged to receive the pin 12 when the handle is mounted in operative position. The parts are arranged with respect to each other so that when connected, the handle will be supported substantially in the position shown in Fig. 1. Thus when drawn forwardly in the direction of the arrow 16 the shaft 1 will be rocked in opposition to the spring 2 and the various mechanisms will be operated to perform their duties and functions. Forward movement of the handle and shaft is limited by a suitable stop 17 against which the arm or plate 7 engages.

It will be noted that the handle is placed in connection with the shaft by placing the socket or hub 14 over the end of the extension 11 so that the pin 12 will be received within the open end of the slot 15; the handle is then drawn forwardly a short distance and the pin 12 draws the hub or socket 14 onto the extension 11 and frictionally binds or locks the said parts together. After the handle has thus been mounted, forward movement thereof rocks the shaft 1 by a positive action but a rearward movement thereof independently of the shaft, when the shaft is forward, is permitted either by movement of the hub or bushing 5 at a speed greater than the return movement of the shaft 1, or by the releasable connection between the handle and the extension 11. The handle may be removed at any time by a movement in the direction of the arrow 18,

which movement will cause the pin 12 to release the hub or socket 14 from its frictional engagement with said extension 11.

I do not restrict myself to the specific arrangement of the parts, but

What I claim and desire to secure by Letters Patent is:

1. The combination with a rock shaft, a hub or bushing journaled in a bearing and supporting one end of said rock shaft, and an arm rigid with said rock shaft, of engaging connections between said bushing and said arm whereby said bushing may rock said shaft, a handle, and means for holding said handle on said bushing, substantially as specified.

2. The combination with a rock shaft, and an arm rigid on said shaft, of a support in which one end of said shaft is revolvably mounted, a bearing in which said support is mounted, means on said support engaging with said arm, and a handle for rocking said support in one direction, substantially as specified.

3. The combination with a rock shaft, and an arm rigid on said shaft, of a bearing, an element revolvably mounted in said bearing and supporting one end of said rock shaft, engaging connections between said element and said arm, and manual means for rocking said element in one direction, substantially as specified.

4. The combination with a rock shaft, a bearing, a hub revolvably mounted in said bearing and supporting said rock shaft, connections whereby rocking of said hub will rock said shaft positively in one direction and permitting said hub to be returned independently of said rock shaft, and a handle for rocking said hub, substantially as specified.

5. In an adding machine, the combination with a main operating rock shaft, a bearing, a hub revolvably mounted in said bearing and supporting one end of said rock shaft, said hub being loose on said rock shaft, and engaging connections whereby rocking of said hub in one direction will also rock said shaft, of a handle operable to rock said hub in one direction positively, substantially as specified.

6. In an adding machine, the combination with a main operating rock shaft, a bearing, a hub, revolvably mounted in said bearing and supporting one end of said rock shaft, said hub being loose on said rock shaft, and engaging connections whereby rocking of said hub in one direction will also rock said shaft, of a handle operable to rock said hub in one direction positively and being automatically released therefrom when moved in the opposite direction, substantially as specified.

7. In an adding machine, the combination with a main operating shaft, a bearing, a

hub loosely supporting said shaft mounted
in said bearing, engaging connections where-
by rocking of said hub in one direction will
rock said shaft, and springs tending to hold
5 said shaft in idle position and restoring said
shaft to idle position after each movement
of said shaft, of a handle, means whereby
said handle may be connected with said hub
and rock said hub in one direction only, sub-
10 stantially as specified.

8. In an adding machine, the combination
with a main operating rock shaft and the
springs for rocking said shaft in one direc-
tion and holding said shaft in idle position,
15 of an arm on said shaft, a hub loosely

mounted on said shaft, an element rigid on
said hub engaging with said arm, a pin on
said hub, a handle, a socket on said handle
arranged to receive said hub and having a
slot to receive said pin, and abutments limit- 20
ing movement of said shaft, substantially
as specified.

In testimony whereof, I have signed my
name to this specification in the presence of
two subscribing witnesses.

HARRY LANDSIEDEL.

In the presence of—

HARRY C. YAEGER,

BIRNEY DYSART.