

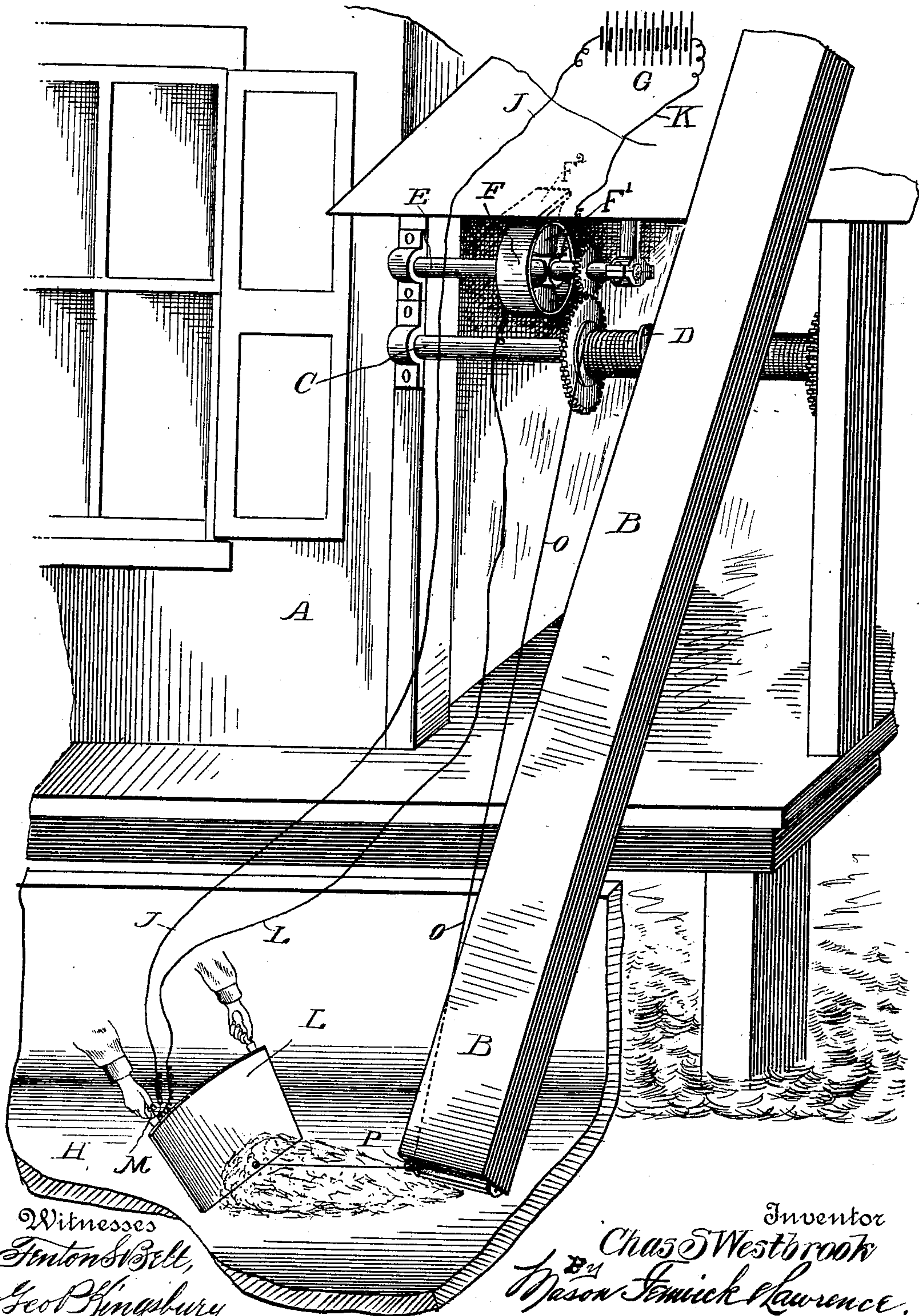
No. 681,941.

Patented Sept. 3, 1901.

C. S. WESTBROOK.
POWER SHOVELING DEVICE.

(Application filed Nov. 28, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES S. WESTBROOK, OF OGDENSBURG, NEW YORK.

POWER SHOVELING DEVICE.

SPECIFICATION forming part of Letters Patent No. 681,941, dated September 3, 1901.

Application filed November 28, 1900. Serial No. 38,021. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. WESTBROOK, a citizen of the United States, residing at Ogdensburg, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Power Shoveling Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates particularly to means for operating shovels in barges and other vessels, and in a general way to like means for operating any devices of like or analogous character and use.

The object of the invention is to economize in the expenditure of manual labor in operating such devices by providing improved means whereby a shovel or scoop or series of shovels or scoops may be operated by a smaller number of men than has heretofore been necessary.

With this object in view the invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically claimed.

In the accompanying drawing I have illustrated my invention as embodied in means for shoveling grain or other bulk material in a barge to the foot of an "elevator-leg," the single figure of the drawing representing a perspective view of so much of an elevator, wharf, and barge as is necessary to a full understanding of the invention.

Referring to the drawing by letters, A indicates an elevator-building; B, the spout or leg of the elevator; C, a shaft upon which is mounted a winding-drum D; E, a motor-shaft upon which is rigidly secured an electric motor F', of any suitable construction, the frame F of which is rigidly secured to a fixed part of the elevator, as shown in dotted lines at Fig. 2, the securing means F² being also of any suitable construction and the two shafts C and E being geared together; G, a battery, dynamo, or other source of electric energy; H, the floor of a barge; I, a scoop or shovel; J, a wire connecting the shovel with the dynamo or battery G; K, a wire connecting the dynamo or battery G with the motor F; L, a

wire connecting the motor F with the shovel I; M, a switch, push-button, or circuit-controller, of any suitable or ordinary construction, mounted upon and carried by the shovel within easy reach of the hand of the operator, and O a cable or rope secured to the drum D, passing around a pulley P at the lower end of the leg B of the elevator, and to the shovel.

In the present embodiment of the invention I have applied it for use with what is known as the "cleaning-up shovel" used in scraping the last remaining portion of the barge-load of grain up to the foot of the leg B to be carried up through the leg by any suitable lifting means; but it will be obvious that the invention may be applied to scoops or shovels for other purposes.

In the operation of the invention the motor F is at all times in gear with the drum D, so that when the circuit is closed and the motor is in operation the drum will also operate, and it is equally obvious that when the circuit is open, which will only be at such times as it is not desired that the drum shall operate, the motor will be stopped and the expenditure of power will cease. The circuit being connected up as hereinafter described and held normally open by the push-button or circuit-controller M, the motor would be still and the cable O will be unwound by drawing upon it, the drum being reversed in the direction of its movement during such unwinding. The shovel may now be carried to the end of the barge and placed in position for forward movement. By operating the controller the circuit is closed, the motor started, and the cable wound upon the drum, and the shovel, guided by the operator, carries the grain forward to the foot of the leg B.

It will be observed that no additional weight of consequence is carried upon the shovel, and owing to the flexibility of the wires, which will be suitably insulated, the operator can move the shovel as freely as though it were entirely disconnected.

Besides the advantage hereinbefore noted, due to the fact that the power is only used when the shovel is in actual operation, the use of this device does away with the necessity of the employment of another person besides the operator of the shovel to manipulate

means for starting and stopping the drum, thus economizing the expenditure of labor.

It will be understood that as many shovels and operative mechanisms may be used in a single barge as may be deemed necessary.

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

1. The combination with a shovel or scoop, of a stationary electric motor for actuating it, a source of electric energy in circuit with the shovel or scoop and the motor, and a circuit-controller carried by the shovel or scoop, substantially as described.

2. The combination with a shovel or scoop, of a stationary electric motor for actuating it, a drum driven by said motor, a cable from

said drum connected to the shovel or scoop, a source of electric energy in circuit with the motor and the shovel or scoop, and a circuit-controller carried by the shovel or scoop, substantially as described.

3. The combination with a shovel or scoop, of a motor, a drum geared thereto, a cable from said drum attached to the shovel or scoop for actuating it, and means attached to and carried by the shovel or scoop for starting the motor, substantially as set forth.

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

CHARLES S. WESTBROOK.

Witnesses:

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