No. 769,943. PATENTED SEPT. 13, 1904.

J. EMBLETON.

TAMPER.

APPLICATION FILED APR. 29, 1904.

NO MODEL.

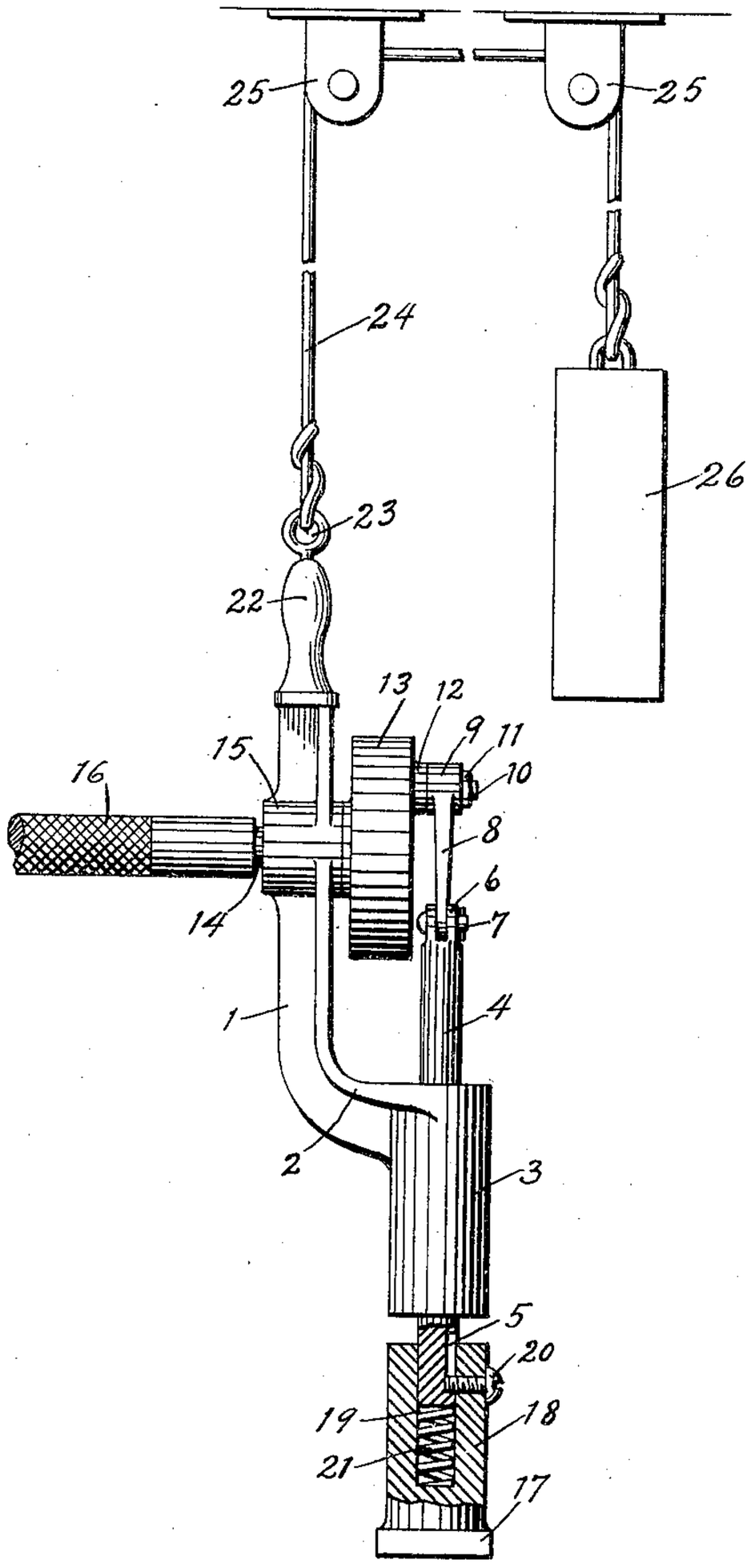

Fig. 1

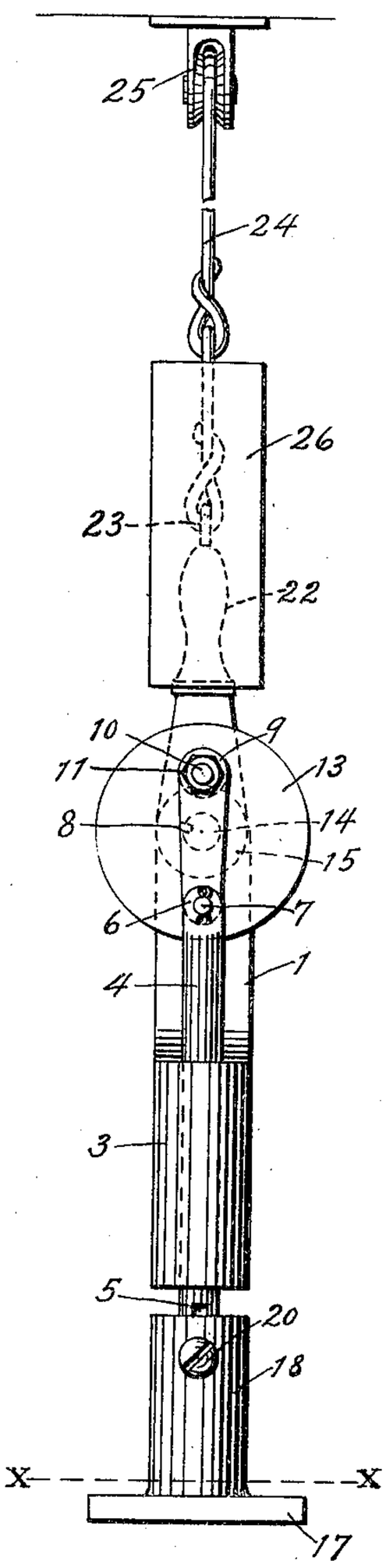

Fig. 2

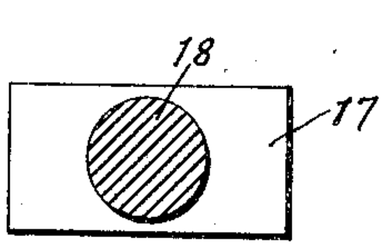

Fig. 3

WITNESSES:

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No. 769,943. Patented September 13, 1904.

UNITED STATES PATENT OFFICE.

JAMES EMBLETON, OF COLUMBUS, OHIO.

TAMPER.

SPECIFICATION forming part of Letters Patent No. 769,943, dated September 13, 1904.

Application filed April 29, 1904. Serial No. 205,524. (No model.)

To all whom it may concern:

Be it known that I, JAMES EMBLETON, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Tampers, of which the following is a specification.

My invention relates to new and useful improvements in tampers.

The object of the invention is to provide a tamper more especially designed to be used in connection with the tamping of molded concrete structures which may be readily connected with a flexible shaft and expeditiously manipulated over the surface treated.

Another feature of the invention resides in means for handling and suspending the tamper whereby the same may be easily moved vertically and laterally.

Finally, the object of the invention is to provide a device of the type set forth that will be strong, durable, and efficient, comparatively inexpensive and simple to manufacture, and one in which the several parts will not be liable to get out of working order.

With the above and other objects in view the invention consists of the novel details of construction and operation, a preferable embodiment of which is described in the specification and illustrated in the drawings, wherein—

Figure 1 is a side elevation of the tamper and its suspending apparatus. Fig. 2 is a front elevation of the same, and Fig. 3 is a top plan view of the tamper-foot.

In the drawings the numeral 1 designates the standard, which is formed at its lower end with an offset 2, from which depends the integral sleeve 3, having sufficient length to afford a hand-grip. A plunger 4 is reciprocatingly mounted in the sleeve 3 and is formed near its lower end with a peripheral vertical groove 5. The plunger 4 is formed with a bifurcated upper end 6, to which is pivotally connected, by means of the bolt 7, a link 8, formed with a bearing-collar 9 at its upper end. The collar 9 is pivotally held on the wrist-pin 10 by the nut 11 and bears against the boss 12, formed around the base of the pin at its junction with the disk plate 13. The disk plate 13 is fixed on a stub-shaft 14, which is rotatably mounted in the bearing-boss 15, formed in the standard 1. The shaft 14 is provided with any suitable means whereby it may be readily connected with an ordinary flexible shaft 16, through which rotary motion is transmitted to the disk plate 13, which revolving at a high rate of speed reciprocates the plunger 4 by means of the pivoted link 8. A tamper-foot 17 of any suitable form, having an upwardly-extending stem 18, provided with a central recess 19, is removably secured on the lower end of the plunger 4 by means of a screw 20, which loosely engages in the groove 5, so as to allow the stem a limited sliding movement upon the plunger. A coiled spring 21 is arranged in the lower portion of the recess and bears against the end of the plunger 4, so as to normally hold the stem in its lowermost position. The purpose of this spring is to absorb all jar and any shock to which the foot might be subjected when coming in contact with a stone or other hardened matter during the tamping action. On the upper end of the standard 1 I form a handle 22, having an eye 23, by which it is suspended from a rope or the like 24, passing over suitable pulleys 25 and carrying at its opposite end a counterbalancing-weight 26. It will thus be seen that the operator, grasping the handle 22 and the sleeve 3, may easily raise or lower the tamper or swing the same from side to side, as the weight 26 will equalize the weight of the tamper, and thus reduce the labor to a minimum.

It will be readily discernible from the foregoing that a very simple and inexpensive device is provided and that such complicated devices as air-compressors or the like, which have been heretofore employed, are obviated.

I do not wish to limit myself to the exact details of construction and operation set forth, as I may make various changes in the same without departing from the spirit of my invention.

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

1. In a tamper, the combination with a reciprocating plunger having a groove, of a tamper-foot having a recess into which the plun-

ger projects, resilient means arranged in the recess and bearing against the plunger, and means carried by the foot and projecting into the groove whereby the foot is allowed a limited movement on the plunger.

2. In a device for tamping concrete blocks in molds, a standard movably supported, a disk plate rotatably mounted on the standard, a plunger connected to the disk plate, a foot supported on the plunger, and a coiled spring engaged with the plunger for cushioning the foot, in combination with a flexible shaft for rotating the disk plate to reciprocate the plunger.

JAMES EMBLETON.

In presence of—
C. C. SHEPHERD,
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