

(No Model.)

J. LARRABEE.

CARRIAGE REVERSER FOR TYPE WRITING MACHINES.

No. 597,723.

Patented Jan. 25, 1898.

Fig. 1

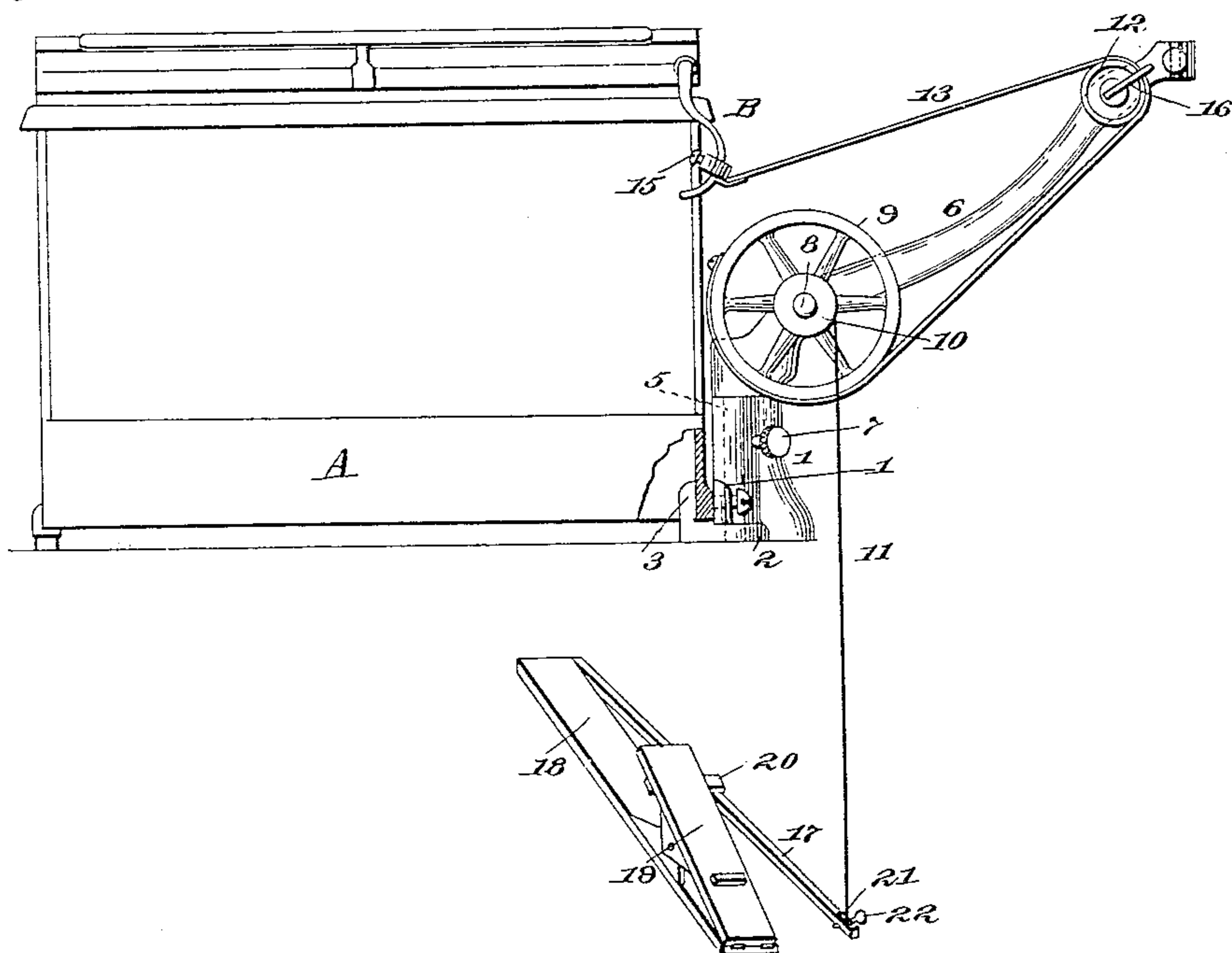


Fig. 2

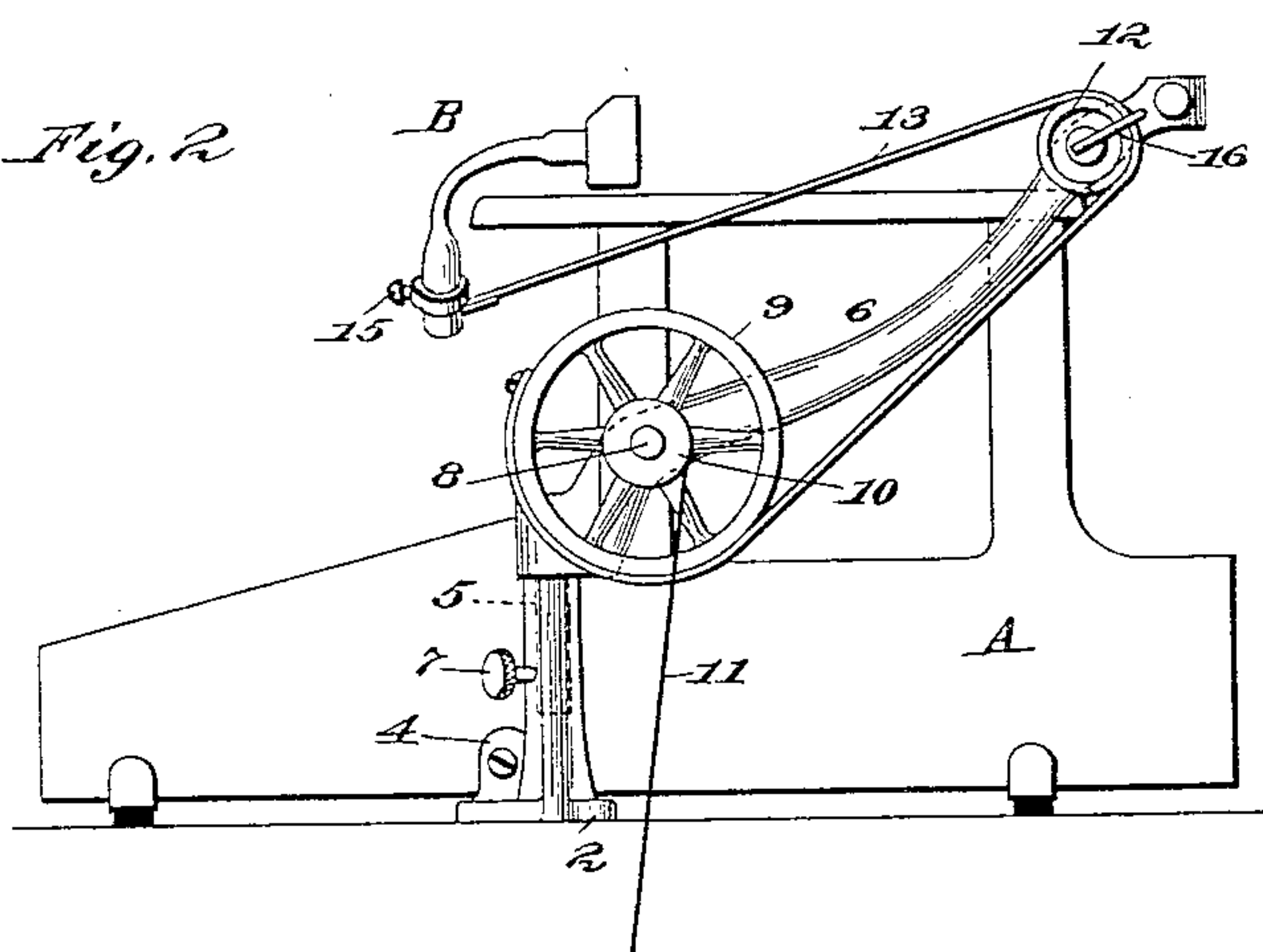
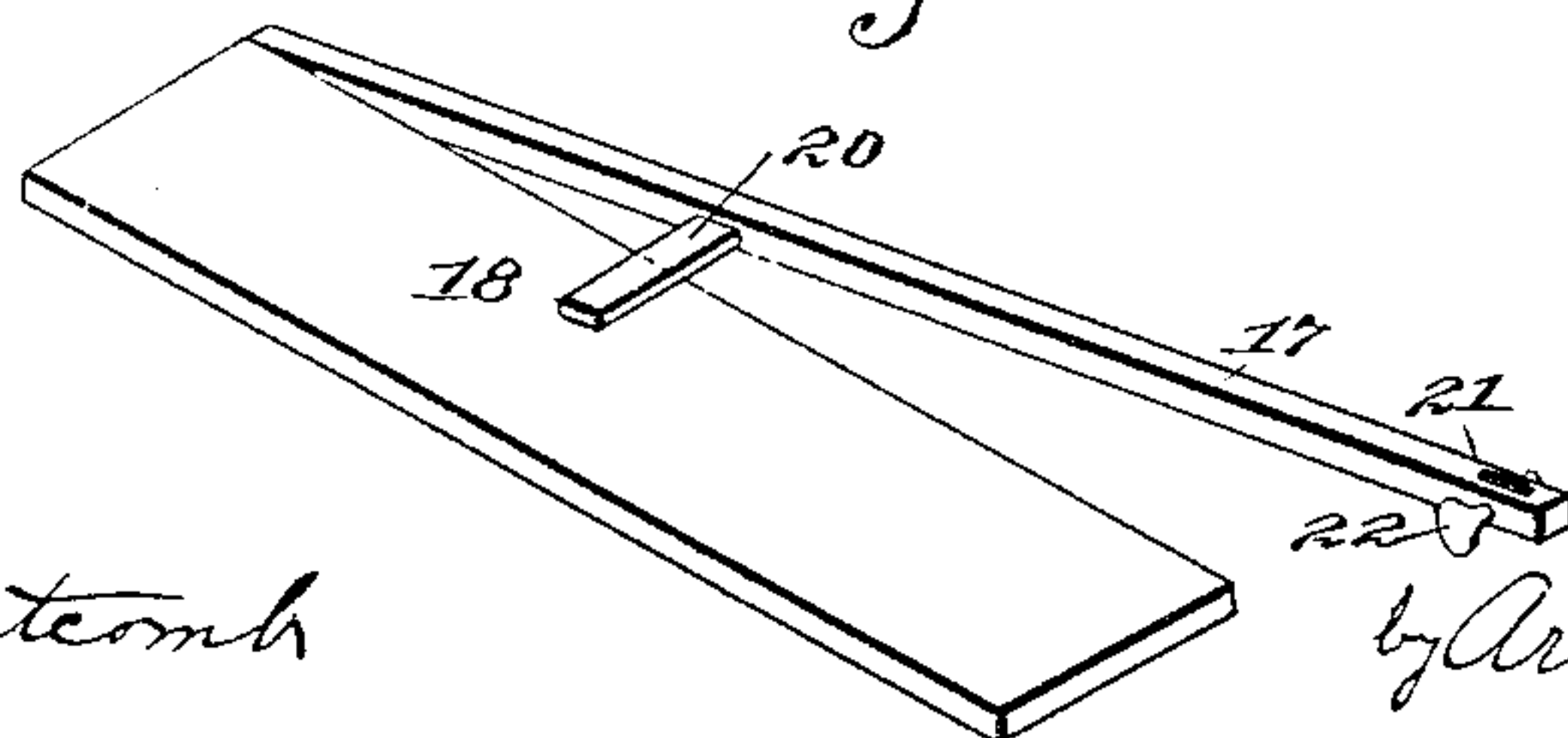


Fig. 3,



Witnesses

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JOE LARRABEE, OF KANSAS CITY, KANSAS.

CARRIAGE-REVERSER FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 597,723, dated January 25, 1898.

Application filed April 30, 1897. Serial No. 634,609. (No model.)

To all whom it may concern:

Be it known that I, JOE LARRABEE, of Kansas City, in the county of Wyandotte and State of Kansas, have invented new and useful Improvements in Carriage-Reversers for Type-Writing Machines; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to type-writing machines; and my object is to provide a simple and practical attachment for such machines which will enable the operator to reverse the carriage and actuate the line-feed mechanism solely by means of the foot, thereby allowing the operator the continuous and uninterrupted use of his hands upon and attention to the keyboard and copy in writing, said attachment involving no change whatever in the construction of any part of the machine as placed on the market. Treadle mechanisms for this purpose have heretofore been produced, some of which are complicated and necessitate alterations from the usual form of construction of some of the parts of the type-writing machine and also prevent the use of the ordinary cover for the machine. My device is purely and simply an attachment and may be quickly adjusted or swung around against the side of the machine, so as to enable the usual cover to be placed over the machine and attachment, or it may be applied to a machine which is adapted to be lowered into a cabinet or desk without interfering with such lowering of the machine.

To these ends my invention consists in the construction and combination of parts, substantially as hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a front elevation of so much of a type-writing machine as is necessary to illustrate the utility of my invention, the attachment being in position for use. Said figure also illustrates my preferred form of treadle. Fig. 2 represents a side elevation of the machine, the attachment being swung to inoperative position, so that a cover may be placed over the whole. Fig. 3 represents a perspective view of a modified form of treadle and will be more particularly hereinafter referred to.

Similar reference-characters indicate similar parts in all the views.

So far as the type-writing machine itself is concerned, it will be unnecessary to describe it further than to mention that A indicates the frame thereof, and B indicates the line-space lever, which is used to draw the carriage back at the finish of each line of printing and to automatically turn the platen for the next line.

My attachment comprises a jointed bracket which is attached to the frame of the type-writing machine and having its outer portion adapted to be folded against the side of the machine and carrying a wheel or pulley, a flexible connection between said pulley and the line-space lever, a foot-treadle, and flexible connections between said pulley and treadle, whereby pressure on the treadle serves to operate the line-space lever in the same manner as is usually done by the hand of the operator.

A short standard 1, having a base or foot piece 2, provided with vertical lugs 3 and 4, is clamped to the lower edge of the end web of the frame, said lower edge entering the space between said lugs, and the standard being held in this position by means of binding or set screws tapped through the outer lugs 4 and bearing against the side of the frame to draw the inner lugs against the inner surface of the web of the frame. The standard is provided with a vertical recess to form a socket for the spindle 5 of a laterally and upwardly inclined arm 6, a binding or set screw 7 being tapped through the side of the standard and adapted to bear against the spindle 5 to hold the arm in the position shown in Fig. 1 or that shown in Fig. 2.

On a short shaft 8, which projects from the side of the arm near its inner end, is mounted a wheel 9, the hub of which forms a small pulley 10, preferably grooved in its periphery to receive the cord 11, the hub of the wheel being extended slightly to one side to form said pulley. Mounted on a short shaft or stud near the outer end of the arm 6 is a pulley 12, which is in the same plane as the wheel 9, and the end of the arm is preferably provided with a vertical opening to receive the spindle or shank of a copy-holder or a sheet-assembling device such as that shown in another application for patent filed by me.

A strap or other suitable flexible strip is

connected at one end to the periphery of the wheel 9, said strap being indicated at 13, and passed over the pulley 12 and having at its other end a ring or clip adapted to be secured to the line-space lever by means of a set-screw 15. A retaining-finger 16 is secured to the arm 6 and extends over the side of the pulley 12 to retain the strap 13 thereon.

The cord 11 (which may be a wire, chain, or any other preferred form of flexible material) extends down past the edge of the table on which the type-writing machine rests or through a suitable opening in said table and has its lower end adjustably connected with the end of an arm 17 of the treadle mechanism. The other end of the lever or arm 17 is pivotally connected to a base-board 18.

In Fig. 1 I have illustrated the base-board as provided with an oscillating pedal 19, which is pivotally connected at about its center with the said base-board, an arm 20 serving to connect the pedal with the arm 17. The arm or bar 20 may obviously be permanently connected with the under side of the toe end of the pedal and project freely over the arm 17, or said arm or bar 20 may be permanently connected with the arm 17 and project freely under the toe end of the pedal. In some cases I may omit the pedal 19 entirely, as indicated in Fig. 3, the arm or bar 20 then serving to receive the pressure of the operator's foot. In either case the location of the arm or bar 20 is between the ends of the arm 17, and therefore the amount of movement of the cord 11 is much in excess of that imparted by the foot—about double when the proportions are as indicated in the drawings.

The means which I prefer for rendering the connection between the arm 17 and the cord 11 adjustable are as follows: A vertical hole or slot 21 is formed in the free end of the arm 17, and a horizontal peg 22 is tightly fitted in holes on opposite sides of said slot, the said peg extending across the slot and having the end of the cord connected to it, so that by turning the peg the cord may be wound more or less thereon, the peg being held in its axially-adjusted position by the friction between it and its bearings in the arm. This adjusting-peg permits of the normal position of the arm 17 relatively to the amount of travel of the carriage of the type-writing machine being adjusted with great nicety.

With the form of treadle mechanism shown in Fig. 1 the pedal 19 forms an easy and natural position for the foot of the operator when at rest, the heel being down and the toe slightly raised, and for that reason I prefer this form; but the treadle mechanism shown in Fig. 3 possesses some advantages for use in connection with type-writing machines in which the entire carriage must be raised to view the work, for this form permits the arm or lever 17 to be raised to any degree.

In the use of my device when attached as shown in Fig. 1 (whether the treadle mech-

anism used be one or the other of the two forms shown) the operator uses the type-writing machine in the usual way until he desires to commence another line. He then depresses the arm 17, (either by oscillating the pedal 19 or by pressure on the bar 20,) which causes the cord 11 to rotate the pulley 10 and wheel 9 in a direction which causes the strap 13 to pull upon and operate the line-space lever in the same manner and to the same extent as is usually done by the hand of the operator.

When the machine is to be covered or lowered into a desk or cabinet, the set-screw 7 is loosened and the arm and its wheels, strap, and cord are swung around or folded against the side of the machine, as shown in Fig. 2.

It is to be understood that I do not limit myself to the precise details and proportions which I have illustrated and described, but reserve the right to make such changes therein as fall within the scope of mechanical skill and to suit the requirements of somewhat differing styles of type-writing machines.

Having now described my invention, what I claim is—

1. A carriage-reversing attachment for type-writing machines, comprising in its construction a jointed bracket adapted to be attached to the frame of the machine and carrying a wheel or pulley, said bracket being constructed to permit its outer portion to be folded against the side of the machine, a flexible band or strip attached to the periphery of said wheel or pulley and having means for connecting it with the line-space lever of the machine, and means for rotating the said wheel or pulley.

2. A carriage-reversing attachment for type-writing machines, comprising in its construction a jointed bracket adapted to be attached to the frame of the machine and carrying a wheel or pulley, said bracket being constructed to permit its outer portion to be folded against the side of the machine, a flexible band or strip attached to the periphery of said wheel or pulley and having means for connecting it with the line-space lever of the machine, a foot-treadle, and flexible connections between said pulley and treadle.

3. The combination with the standard having means whereby it may be attached to the frame of a type-writing machine and provided with a vertical socket, of the arm 6 having a spindle fitted to said socket whereby the arm may be folded against the side of the machine, said arm being provided with the wheel 9 and integral pulley 10 near its inner end and the pulley 12 near its outer end, and flexible connections 13 and 11 substantially as and for the purpose set forth.

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

JOE LARRABEE.

Witnesses:

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BERTHA PEPPER.