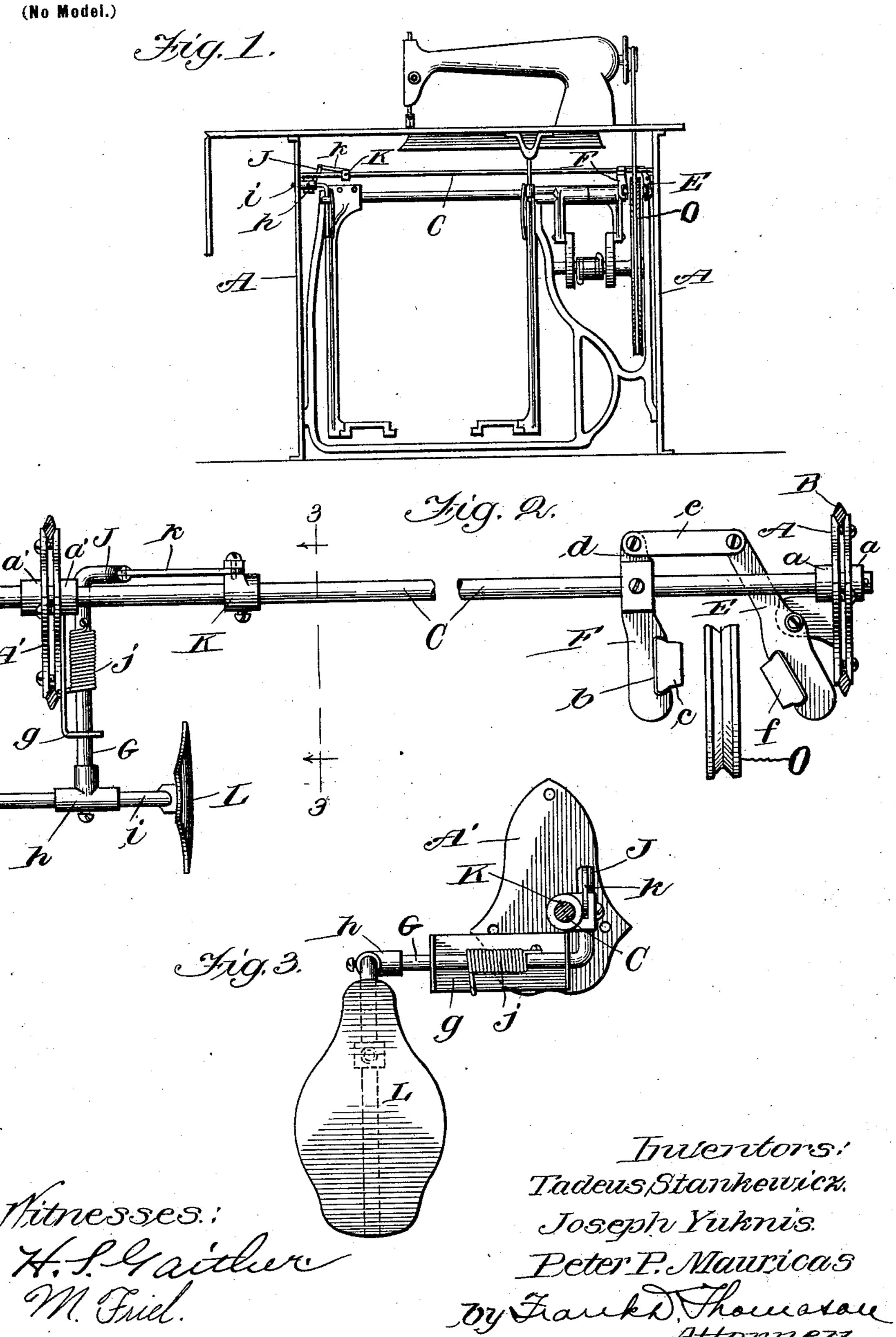
T. STANKEWICZ, J. YUKNIS & P. P. MAURICAS.

BRAKE FOR SEWING MACHINES.

(Application filed Apr. 17, 1902.)



United States Patent Office.

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BRAKE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 711,542, dated October 21, 1902.

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To all whom it may concern:

Be it known that we, TADEUS STANKEWICZ, JOSEPH YUKNIS, and PETER P. MAURICAS, citizens of the United States, and residents of 5 Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brakes for Sewing-Machines, of which the following is a full, clear, and exact description.

The object of our invention is to provide simple, cheap, and effective braking mechanism for sewing-machines which can be easily applied either to a new or an old machine and which is actuated by the pressure of the 15 knee of the operator and requires no manipulation with the hands at all and when actuated instantly stops the action of the machine. This we accomplish by the means hereinafter fully described and as particu-

20 larly pointed out in the claims.

In the drawings, Figure 1 shows a front elevation of a sewing-machine having our invention applied thereto. Fig. 2 is a plan view of our invention, drawn to a larger scale 25 and removed from the sewing-machine, with portions of the reciprocal actuating - bar broken away. Fig. 3 is a transverse section. taken on dotted line 3 3, Fig. 2, looking in the direction indicated by the arrows.

In the drawings, A A' represent two pairs of suitably-shaped plates, which are adapted to be clamped one to one legand the other on the other leg of a sewing-machine B by means of screws or otherwise, substantially as shown in 35 the drawings, and thus form a support for the other parts of the invention. These plates preferably correspond in shape and are provided with suitable guide-bearings aa', in and through which a horizontal reciprocal trans-40 mission-bar Chas sliding engagement. Sliding bar C is of such length that it bridges over the space between the legs of the sewing-machine and can reciprocate in its bearings without being displaced. Near the leg nearest 45 which the fly-wheel O is located this bar has a stationary arm F secured thereto at such a point that when said bar is moved in the proper direction it can bear against the side of the rim of the fly-wheel O farthest from the con-50 tiguous leg of the machine. That edge or side

of this arm contacting with the fly-wheel O is

provided with a suitable integral clip b, in which a rubber shoe c is seated and secured. Projecting in the opposite direction from the boss of this arm F is a pivotal lug d, which is 55 connected to a pivoted arm or lever E by means of a link e. This lever is fulcrumed about its center of length to a bracket projecting from the inner of the two clamping-plates A, and the branch thereof opposite that to which 60 the link is connected is provided with a suitable clip for the retention of a rubber shoe f. Lever E is located on the side of the fly-wheel O opposite arm F, and the shoe f, carried thereby, corresponds in shape to shoe c and 65 together therewith is adapted when the bar C is moved toward plate A to grapple and clamp the fly-wheel O so tightly as to stop the

same instantly.

The bar C could be reciprocated to and 70 from plates A in any suitable manner; we prefer, however, to move said rod so as to cause said shoes to clamp the fly-wheel by mechanism which is actuated by a slight side movement of the knee of the operator, and to 75 make the return movement thereof automatic. This we accomplish through the medium of a horizontal rock-shaft G, which is journaled in bearings in the parallel ends of a U-shaped bracket q. The forward end of 80 this rock-shaft has a suitable holder h secured thereto, and into the transverse socket of this holder the L-shaped shank i of the knee-plate L adjustably secured. The location of this knee-plate is such that the sew- 85 ing-machine operator has but to move the knee laterally without removing the feet from the pedals of the machine to engage it. The normal position of said knee-plate is in a suitably-vertical plane and at right angles to its 90 shank, and when it is engaged by the knee of the operator it causes the rock-shaft G to rock. When the knee-pressure is removed therefrom, a coil tension-spring j, wound thereon between its bearings, restores said 95 rock-shaft and said knee-plate to their original positions. The rear end of rock-shaft G extends through its bearings to the rear of the bar C, and the upper end of the crank J thus formed extends above the plane of the 100 bar C and has pivotally connected thereto a link k. This link extends and is pivotally

connected to an adjustable collar K, secured fast to bar C. Thus every time the kneeplate is moved and shaft G rocked the crank J, through the medium of link k and collar 5 K, reciprocates the transmission-bar C.

It is apparent that either arm F or the arm or lever E could be dispensed with and the remaining member depended upon to furnish the brake for the fly-wheel O of the machine. 10 Our invention contemplates such a possibility, as well as such changes in the construction and dimensions of the other parts of the invention as will permit its application. to other sewing-machines than the type illus-

15 trated in the drawings, and we wish to be understood as considering the same within the scope of our invention, the essential features of which are the reciprocal bar for transmitting the power and the grappling or clamp-20 ing arm or arms.

What we claim as new is—

1. A brake for sewing-machines comprising an automatically-returnable reciprocal bar, an arm rigid with said bar, and a pivoted arm 25 or lever actuated by said bar which, together with said first-mentioned arm, clamp the flywheel of the machine when the bar moves in one direction, and release the same when the bar moves in the opposite direction.

2. A brake for sewing-machines comprising an automatically-returnable reciprocal bar, a knee-plate, operatively connected thereto, and arms actuated by said bar to grapple and clamp the fly-wheel of the machine when said 35 bar moves in one direction, and to release the

same when the bar is moved in the opposite direction.

3. A brake for sewing-machines comprising a reciprocal bar, a knee-plate operatively 40 connected thereto, an arm rigid with said bar and a pivoted arm or lever actuated by said bar which, together with said first-mentioned arm clamp the fly-wheel of the machine when said bar moves in one direction, and release 45 the same when the bar is moved in the opposite direction.

4. A brake for sewing-machines comprising an automatically-returnable reciprocal bar, a knee-plate operatively connected thereto, an 50 arm rigid with said bar and a pivoted arm or lever actuated by said bar which, together with said stationary arm clamp the fly-wheel of the machine when said bar moves in one direction, and release the same when the bar 55 is moved in the opposite direction.

5. A brake for sewing-machines comprising a reciprocal bar, an arm rigid with said bar and carried thereby, a pivoted arm or lever, and a link connecting said rigid and pivoted

60 arms, which latter grapple and clamp the flywheel of the machine between them when the bar moves in one direction, but release the same when the bar moves in the opposite direction.

6. A brake for sewing-machines comprising 65 a reciprocal bar, a knee-plate operatively connected to said bar, an arm rigid with said bar and carried thereby, a pivoted arm or lever, and a link connecting said rigid and pivoted arms, which latter grapple and clamp the 70 fly-wheel of the machine between them when the bar moves in one direction, but release the same when the bar moves in the opposite direction.

7. A brake for sewing-machines comprising 75 a reciprocal bar, a rock-shaft arranged transversely thereto, and operatively connected to and actuating said bar, a knee-plate connected to said rock-shaft, and an arm actuated by said bar which is adapted to engage 80 the fly-wheel of the machine when said bar moves in one direction, but releases the same when it moves in the opposite direction.

8. A brake for sewing-machines comprising a reciprocal bar, a rock-shaft arranged trans- 85 versely thereto, and operatively connected to and actuating said bar, a knee-plate connected to said rock-shaft, an arm rigid with and carried by said bar, a pivoted arm or lever, and a link connecting said rigid and piv- 90 oted arms, which latter grapple and clamp the fly-wheel of the machine when said bar moves in one direction, but release the same when it moves in the opposite direction.

9. A brake for sewing-machines comprising 95 a reciprocal bar, a rock-shaft arranged transversely thereto, and operatively connected to and actuating said bar, a knee-plate connected to said rock-shaft, an arm rigid with and carried by said bar, a pivoted arm or lever, roo and a link connecting said rigid and pivoted arms, which latter grapple and clamp the flywheel of the machine when said bar moves in one direction, but release the same when it moves in the opposite direction.

10. A brake for sewing-machines comprising a reciprocal bar an automatically-returnable rock-shaft arranged transversely thereto having a crank on one end, a link connecting said crank to said bar, a knee-plate the 110 L-shaped shank of which is secured to said rock-shaft, an arm rigid with and secured to said bar, a pivoted arm or lever and a link connecting said bar and pivoted arm, as and for the purpose set forth.

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Witnesses:

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