

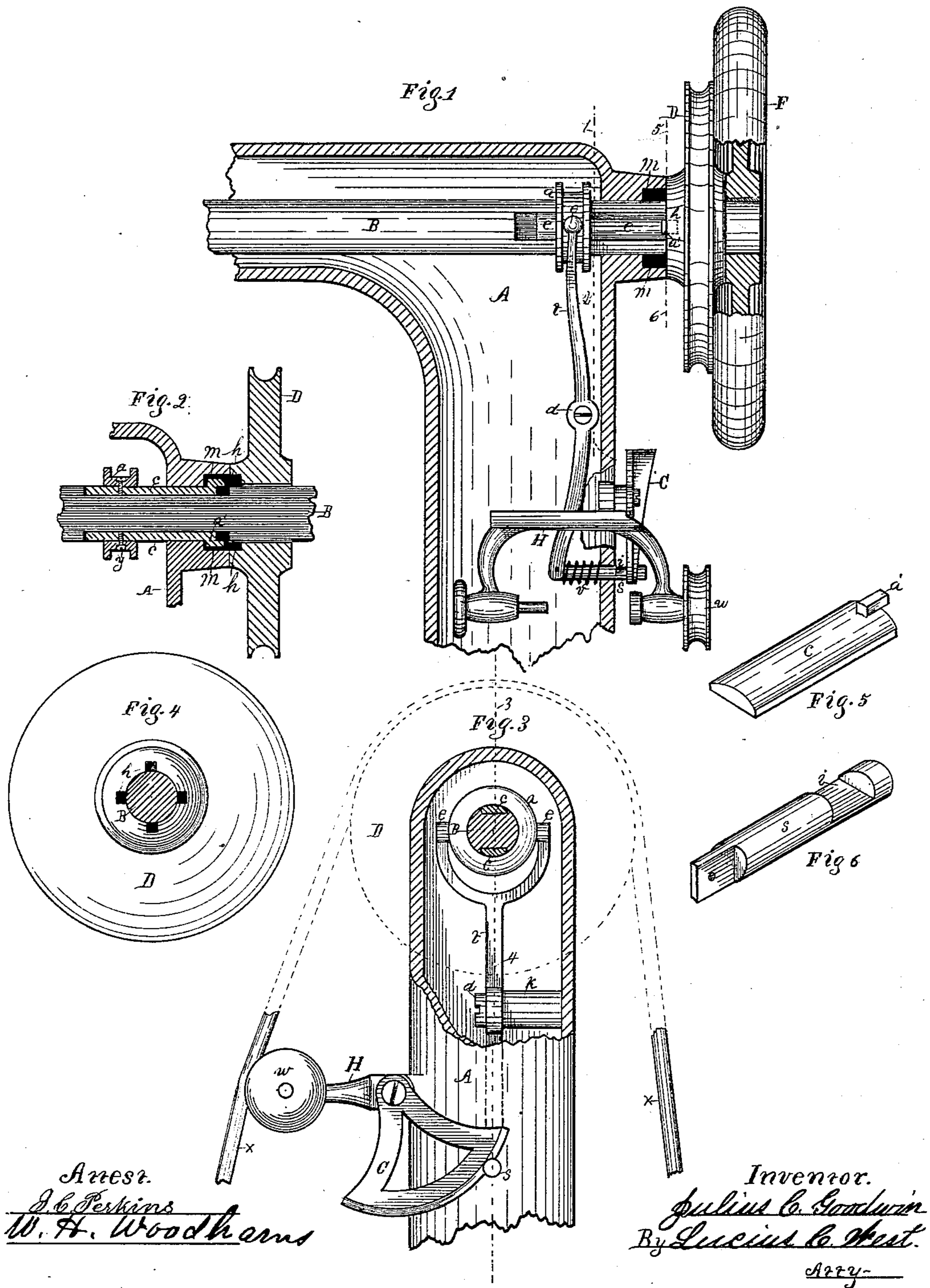
(No Model.)

J. C. GOODWIN.

BOBBIN WINDER FOR SEWING MACHINES.

No. 259,383.

Patented June 13, 1882.



Attest.
J. C. Perkins
W. H. Woodhams

Inventor.
Julius C. Goodwin
By Lucius C. West.
Atty-

UNITED STATES PATENT OFFICE.

JULIUS C. GOODWIN, OF KALAMAZOO, MICHIGAN, ASSIGNOR OF ONE-HALF
TO WILLIAM HOTOP, OF SAME PLACE.

BOBBIN-WINDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 259,383, dated June 13, 1882.

Application filed March 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, JULIUS C. GOODWIN, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, have invented new and useful Improvements in Sewing-Machines, of which the following is a specification.

My invention has for its objects certain improvements, in combination with the bobbin-winder, to effect useful results, hereinafter described.

In the drawings, forming a part of this specification, Figure 1 is a side elevation of my invention, showing the machine-arm partly in section and the bobbin-winder swung down; Fig. 2, a section on line 3 4 in Fig. 3; Fig. 3, a view, looking from a point at the right of Fig. 1, with the bobbin-winder swung up to engage the belt, the upper portion of said figure being in section on line 1 2 in Fig. 1; Fig. 4, an end view of the hub of the belt-pulley, with the pulley-shaft in section, on line 5 6 in Fig. 1; and Figs. 5 and 6, detached parts in perspective, hereinafter described.

B is the pulley-shaft, located in the hollow arm A, as in many sewing-machines, said shaft connecting with the needle-bar (not here shown) in a manner to impart a vertical movement thereto.

F is the fly-wheel, rigidly keyed to shaft B. D is the belt-pulley, revolvably located on shaft B, around which the belt *x x* is located, at the top, the lower portion of said belt being located, in the usual manner, around the treadle-wheel below the table. (Not here shown.)

H illustrates the common bobbin-winder with belt-wheel *w*. I provide this bobbin-winder with a cam-lever, C, integrally formed therewith, or firmly secured to the same at the point of pivoting, Fig. 3. The circular edge of this lever C consists of a flange or rim increasing in width from one end to the other, Fig. 1. *t* is a vertical lever pivoted to the arm A on the inside, or to other suitable support at *d*. The lower end of this lever terminates in a right-angled extension, *s*, through the right

side or wall of arm A, and bears spring *v*. This extension may be rigidly or integrally formed with the vertical part of the lever, or it may be pivoted, as in Figs. 1 and 6. When rigidly secured the hole through which it passes should be sufficiently large to admit of the slight vertical play of said part *s*. The outer end is provided with slot *i*, adapted to receive the tapered rim of the lever-cam, Figs. 1 and 6. The upper end of the vertical lever *t* is loosely located in a groove of a collar, *a*, said collar being adapted to revolve with shaft B, and to be moved laterally thereon, Figs. 1, 2, 3. To this collar a locking slide or bar, *c*, is secured, one or more, as desired. This slide *c* is provided with a projection, *a'*, which is adapted to pass into mortises *h h* of the hub of belt-pulley D in locking said pulley. The locking-slide *c* is located in a channel or recess in shaft B, and is adapted to slide back and forth therein. *m m* is a recess formed in the end of the shaft-support around said shaft B to accommodate projections *a' a'*. By thus adapting a bobbin-winder to lock and unlock the belt-pulley greater convenience in construction and operation is effected, especially in sewing-machines of the style described, and nearly all the mechanism is shielded from view.

In the operation, referring to Fig. 1, when the bobbin-winder is swung down, bringing the narrow end of the inclined rim in recess *i*, as in said figure, spring *v* forces the lever *t* back, moving collar *a* to the right, with the locking-slide *c*, thus locking the belt-pulley, as before explained. Swinging the bobbin-winder up, as in Fig. 3, moves lever *t* to the left, and also the collar *a* and locking-slide *c*, unlocking the belt-pulley, as in Fig. 2.

Having thus described my invention, what I claim is—

1. In a sewing-machine, the combination, with the recessed pulley-shaft provided with the collar and locking-slide, the belt-pulley having the recesses to receive the locking-slide, and the bobbin-winder provided with the cam-lever, of the pivoted lever having the right-angled extension, bearing a spring, and slotted

to receive said cam-lever, the upper end of said pivoted lever being adapted to operate the sliding lock, all substantially as set forth.

2. In a mechanism for causing the move-
5 ments of the bobbin-winder to lock and unlock the belt-pulley, the combination, with the pulley-shaft having the recess in which the locking-slide is located, and the locking-slide hav-

ing the end projections, of the shaft-supporting arm, provided with the recess in which 10 said projections play when the shaft revolves, substantially as described and shown.

JULIUS C. GOODWIN.

Witnesses:

W. H. WOODHAMS,

W. H. WOODHAMS, Jr.