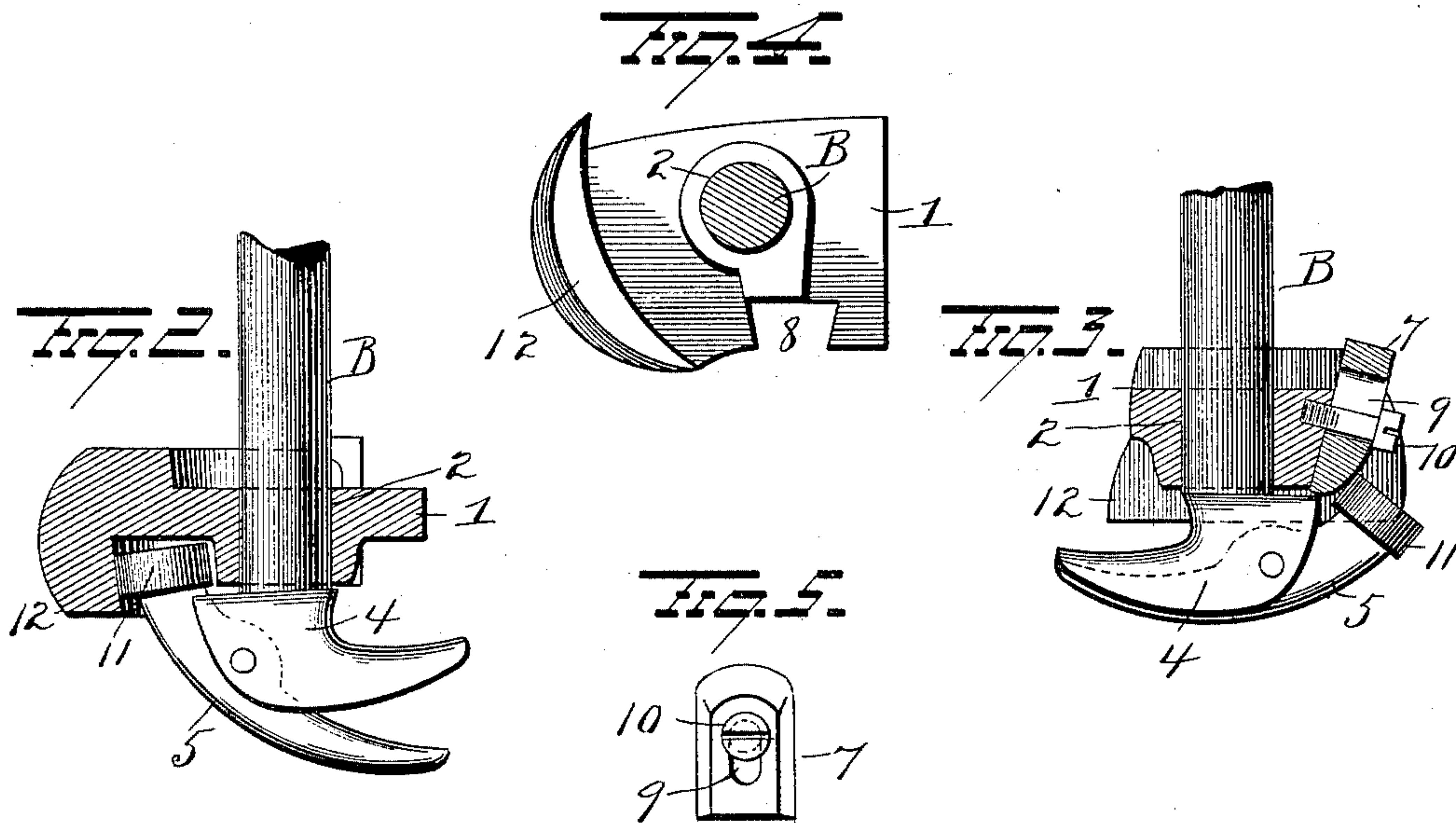
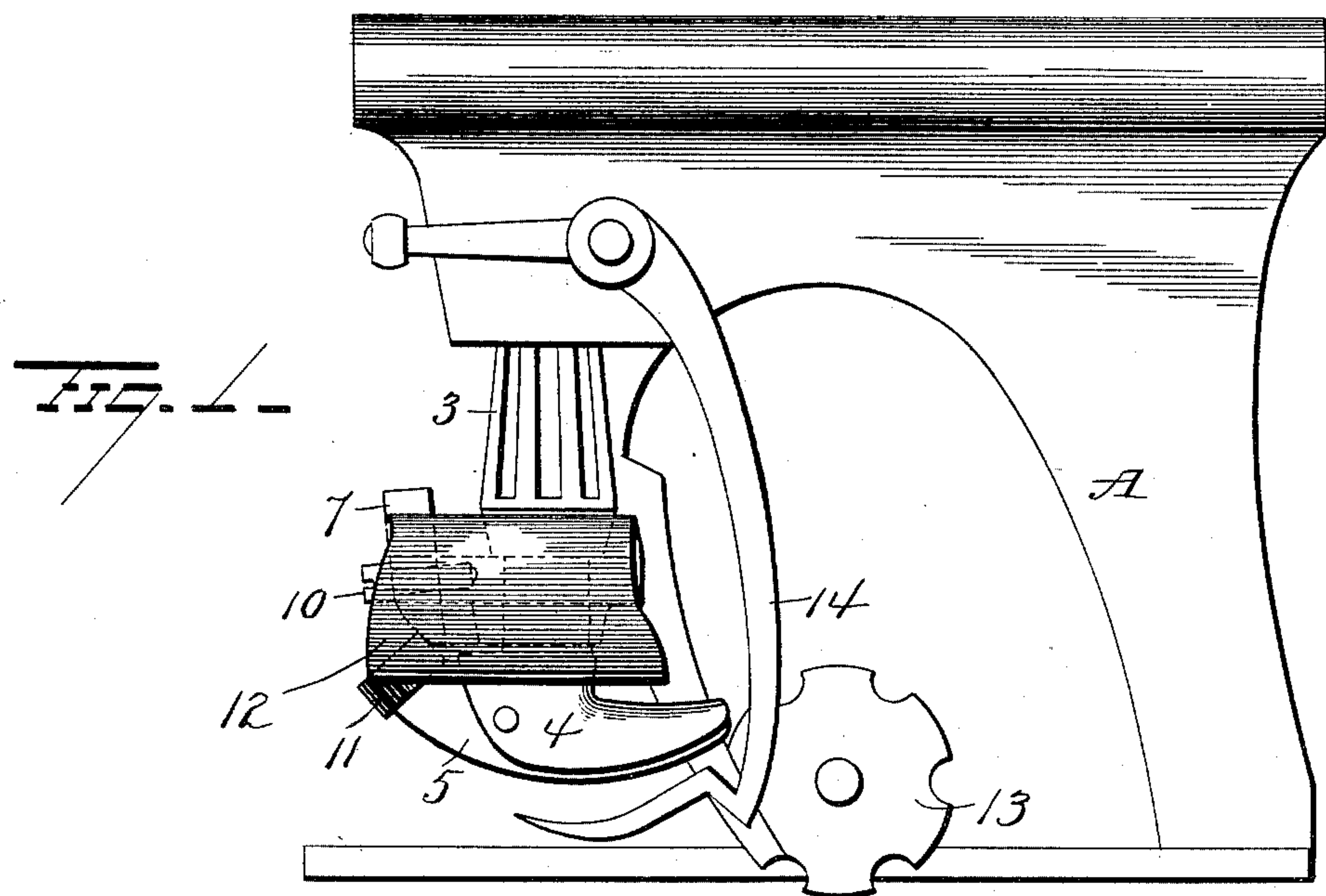


(No Model.)

W. M. SHEETS.
KNOTTER FOR HARVESTERS.

No. 592,514.

Patented Oct. 26, 1897.



Witnesses
E. J. Nottingham
G. F. Downing.

Inventor
W. M. Sheets
By *H. A. Seymour*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM M. SHEETS, OF DEFIANCE, OHIO, ASSIGNOR OF ONE-HALF TO
MICHEAL WALZ, OF SAME PLACE.

KNOTTER FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 592,514, dated October 26, 1897.

Application filed January 7, 1897. Serial No. 618,370. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. SHEETS, a citizen of the United States, residing at Defiance, in the county of Defiance and State of Ohio, have invented certain new, useful, and valuable Improvements in Knotters for Harvesters, of which the following is a specification.

My invention relates to an improvement in knotters for harvesters, the object being to provide means for causing positive movements of the knotting-nib; and it consists in combined mechanism for operating the nib in both of its movements, whether inward or outward.

In the accompanying drawings, Figure 1 is a view in side elevation of my improved knotter and some of the connected mechanism. Figs. 2 and 3 are views in side elevation, taken from opposite sides, parts being in section. Fig. 4 is a bottom plan, and Fig. 5 is a detail.

A represents a portion of the frame of the machine. This frame has a plate 1 with hole 2 therein.

B is the knotter-shaft, the same being rev-
olubly supported in the hole 2 in the frame. On the upper end of this shaft is secured the usual bevel-gear 3, through which motion is imparted to the knotter, and on the lower end is securely attached the nib 4. This nib 4 is grooved through its bottom, whereby it is divided into two parts, and the movable nib 5 is pivoted between said parts and coöperates therewith in substantially the usual manner.

The means for operating this pivoted nib differs from the prior art in this respect that the operation of the pivoted nib is always positive and direct and the adjustment of the closing-cam 7 is always on a stationary part of the machine, where it can be readily adjusted without reference to the position of other parts. Hitherto such a cam has been adjustably connected with the knotter-shaft, but the objection to this arrangement is that unless the parts of the machine are at a certain position it is difficult, if not absolutely impossible, to set the cam. It frequently necessitates starting the machine up until the knotter has turned to a certain convenient point,

and then it is just as liable to turn a little too far or not quite enough, because it is next to impossible to control the movement of these parts, or else it is necessary to take too much of the machinery apart to get at the set-screw. In the present invention a fixed place is provided for this cam 7. It is set in a dovetailed hole 8 in an edge of plate 1, and it being provided with the elongated slot 9 and a set-screw 10 extending therethrough it is evident that it can be slid directly downward at any time as it wears off and occasion requires it into the path of the roller 11 on the nib 5. This closing-cam 7 is always in one position and thus may be made readily accessible at all times, and by merely loosening the set-screw 10 a trifle and giving a smart stroke with a wrench or hammer upon the closing-cam it is fed forward to the required position, and the set-screw is then set to hold and retain it in position. A depending-cam flange 12 is provided for opening the nibs at the required interval in the rotation of the knotter.

A twine-holder 13 is revolubly supported on the frame of the machine at some convenient point, and it is adapted to receive and hold the twine, and a pivoted twine-carrying arm 14 carries it to the knotter.

The knotter is rotated in the usual manner, and the roller 11 on the pivoted nib upon reaching the depending cam-flange is opened to receive the twine. When it reaches the closing-cam, it is closed over the twine, and the knot is formed as usual.

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

1. In a knotter, the combination with a pair of nibs, one rigid and the other pivoted, of a pair of rigid cams, one fixed and the other adjustably connected with the frame of the machine for positively opening and closing the pivoted nib.

2. In a knotter, the combination with a plate having a hole therein, and provided with a depending cam-flange, of a rotary shaft having a nib fixed thereon, a nib pivoted beneath this nib and having a roller thereon, and a closing-cam rigidly and adjustably connected with

the plate and adapted to be set to close the pivoted nib.

3. The combination with the frame of the machine, a twine-holder revolubly supported
5 thereon, and a twine-stripper pivoted to the frame, of a knotter comprising a rotary shaft having a nib secured thereon and one pivoted

thereon, and two rigid cams one fixed and the other adjustably attached to the frame.

WILLIAM M. SHEETS.

Witnesses:

W. D. HILL,
HENRY G. BAKER.