

United States Patent Office.

THOMAS F. BROWN, JR., OF CONCORD, NEW HAMPSHIRE.

Letters Patent No. 81,471, dated August 25, 1868.

IMPROVEMENT IN SKEIN-HOLDER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, THOMAS F. BROWN, Jr., of Concord, of the county of Merrimack, and State of New Hampshire, have invented an Adjustable Trimming or Skein-Holder; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, and

Figure 2 a longitudinal section of it.

Figure 3 is an edge elevation of it, as arranged in a skein of braid.

Braid or tape, as put up for sale in the market, is generally wound in a skein. It is customary for the purchaser, preparatory to using it, to unravel it and wind it on a card, or in a ball. The purpose of my invention is to save the necessity of doing this, and to enable a person to use the braid or tape in the skein.

In the drawings, A and B are two long isosceles-triangular plates, each being furcated, or formed with a notch, *a*, in its shortest side.

Each plate also has a long slot, *s*, arranged longitudinally in it. Furthermore, each plate has a notch, *b*, in its vertex.

At that end of the slot next the vertex of each of the plates A B is a bolt, C, whose head, *c*, is square, and sunk in the plate. These bolts go through the two slots and washers *d d*, arranged in manner as represented, the bolts being riveted down upon the washers.

An elastic cord or spring, D, goes through each of the vertex notches *b*, and the two slots, in manner as shown in fig. 2, the two ends of the cord being united or tied together. This elastic cord serves, by its contractile power, to move the two plates in opposite directions, longitudinally of each other, while they are held in connection by the bolts and washers, arranged as above explained. The apparatus so made may be readily contracted lengthwise, so as to enable a person to introduce it into a skein. After having been placed therein, the two parts A B will be moved by their spring, so as to distend the skein and hold it in their larger notches, in which case the skein will be reeled, as it were, on the holder, and may be removed therefrom in such quantity or quantities as occasion may require.

I claim the combination of the plates A B, slitted and notched, as described, with their connections and operative spring, arranged and applied to them substantially as specified, the whole being for the purpose as explained.

T. F. BROWN, JR.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.

UNITED STATES PATENT OFFICE.

THOMAS S. BROWN, OF POUGHKEEPSIE, NEW YORK.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **81,472**, dated August 25, 1868.

To all whom it may concern:

Be it known that I, THOMAS S. BROWN, of Poughkeepsie, county of Dutchess, and State of New York, have invented a new and useful Improvement in Clutch Mechanism for Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a plan view of the invention. Fig. 2 is a front elevation of the shipping-lever and sliding fork.

Like letters refer to like parts in both figures.

My invention consists of a novel device for engaging and disengaging a clutch with a shaft, for the purpose of throwing the cutters in and out of action by means of a shipping-lever, reciprocating fork, and spring, whereby the clutch and clutch-wheel, when disengaged, are prevented from being accidentally thrown into gear by the jar of the machine in passing over rough and uneven ground, or from other cause, and when engaged with the shaft the usual friction and consequent wear of the fork in the groove of the clutch are obviated.

In the accompanying drawings, A is a shaft, to which the power is applied. B is a driving-pin upon such shaft. C is a wheel, to which motion is to be imparted. The hub of the wheel C is ratcheted on the end adjacent to the driving-pin B. The other end of the hub is provided with a groove, D, to receive the sliding fork E, by means of which, when operated by the shipping-lever F, the wheel C, sliding on the shaft A, is engaged with or disengaged from the driving-pin B.

F is a shipping-lever, having a cam or eccentric slot with a notch or recess at G. H is a pin on the sliding fork E, fitting into and operated by the eccentric slot in shipping-lever F. I is a spiral spring, which answers the twofold purpose of keeping the wheel C in position when engaged or clutched with the driving-pin B, and also of forming part of the device which constitutes the lock, and holds the same wheel in position when it is disengaged from the driving-pin.

It will readily be seen that when the wheel

C is disengaged from the pin B, and the sliding fork is thrown back so that the lever F assumes the position shown in Fig. 2, the pin H having entered the notch G, the lower arm of the lever stands at such angle from its fulcrum at K that the effect of the pressure of the spring, applied through and by means of the fork E and pin H, is to keep the pin firmly in the notch, and thereby lock the lever in such position as to effectually prevent the clutch or ratchet from becoming accidentally engaged with the driving-pin, while, at the same time, a slight pressure upon the upper end of the lever will disengage the lock and allow the wheel to become engaged with said driving-pin.

It will also be seen that the usual friction and consequent wear upon the groove D and fork E are entirely obviated by my arrangement, because, when the wheel C is in gear, the pressure of the spring I is exerted against the wheel C and the pin B, leaving the fork loose and free in the groove; and although, when the wheel is detached or out of gear, the pressure is exerted against the fork, yet the wheel is at rest, and of course there can be no friction between the parts.

Having thus described my invention, what I claim, and desire to have secured to me by Letters Patent, is—

1. The shipping-lever provided with a cam or eccentric slot and notch, to receive the pin on the sliding fork, when constructed and operating substantially as set forth.

2. The combination of the slotted and notched lever with the spiral spring and the sliding fork, when constructed and operating substantially as set forth.

3. The combination of the slotted and notched lever with the spiral spring, the sliding fork, and the wheel having a grooved and ratcheted hub, when constructed and operating substantially as set forth.

In testimony whereof witness my hand this 27th day of June, 1868.

THOS. S. BROWN.

Witnesses:

ROBT. N. PALMER,
E. Q. ELDRIDGE.