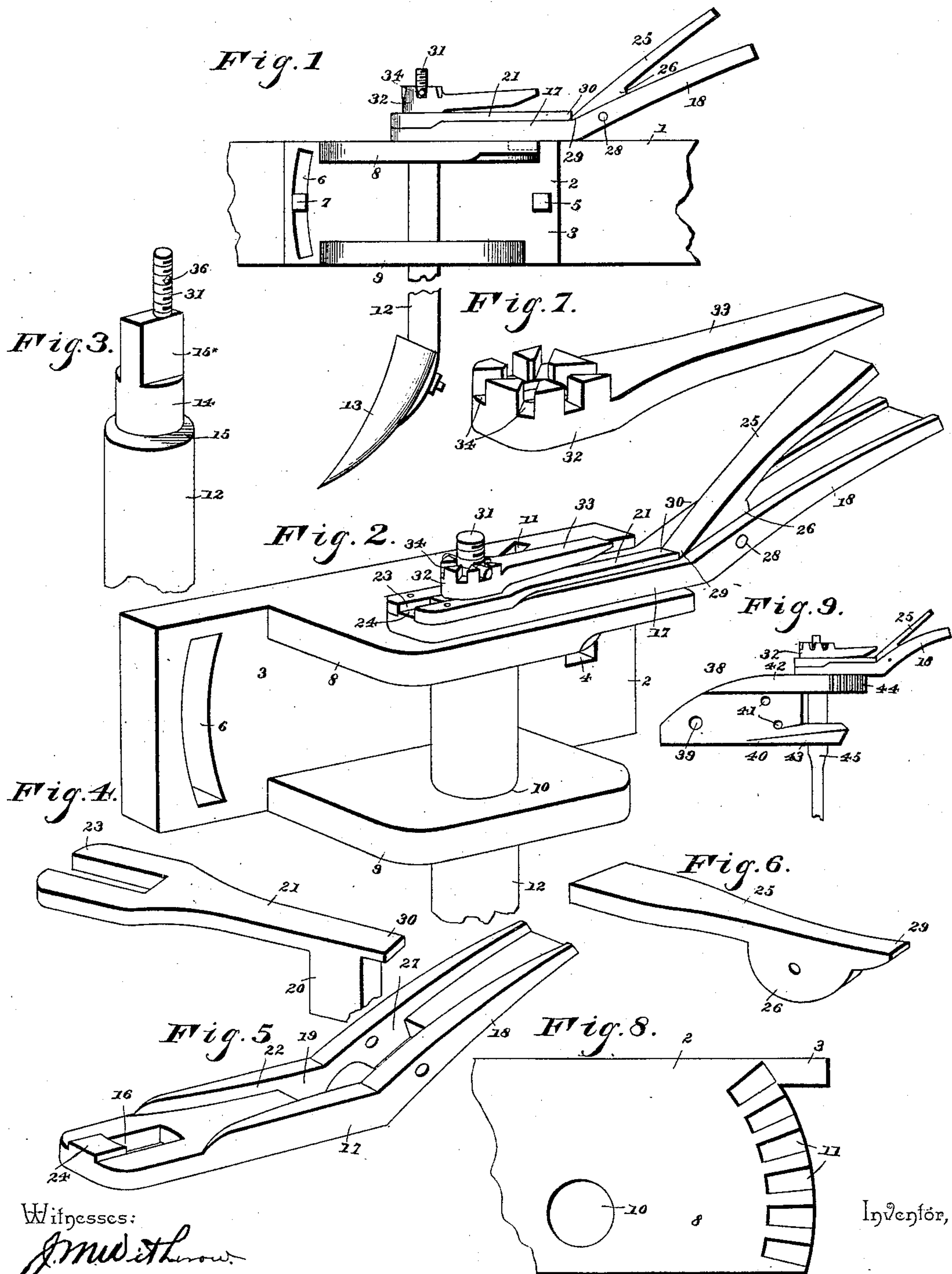


(No Model.)

W. H. PRISK
PLOW.

No. 429,060.

Patented May 27, 1890.



Witnesses:

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UNITED STATES PATENT OFFICE.

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PLOW.

SPECIFICATION forming part of Letters Patent No. 423,060, dated May 27, 1890.

Application filed March 28, 1890. Serial No. 345,716. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. PRISK, a citizen of the United States, residing at Monticello, in the county of Green and State of Wisconsin, have invented a new and useful Plow, of which the following is a specification.

This invention has relation to improvements in plows, and especially to the means of connecting the plow standard or post to the beam.

The objects of the invention are to provide a simple and inexpensive means for swiveling the standard or post in such a manner as to permit of a ready and quick lateral adjustment of the shovel or a removal of the same, and this without the necessity of unscrewing nuts or the employment of any hand-tools.

Various other objects of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a portion of a plow-beam provided with a shovel-standard connected therewith in accordance with my invention. Fig. 2 is an enlarged perspective in detail of the attaching device or knuckle disconnected from the beam. Fig. 3 is a detail in perspective of the upper end of the shovel-standard. Fig. 4 is a detail in perspective of the spring-latch. Fig. 5 is a similar view of the latch-operating lever. Fig. 6 is a similar view of the standard-operating lever. Fig. 7 is a similar view of the tail-nut. Fig. 8 is a detail in plan of the locking end of the knuckle. Fig. 9 is a side elevation of a knuckle slightly modified to adapt it to the rear end of the iron beam of a walking or corn sulky.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 represents the beam of a plow, either of iron or wood, and to the side of the same there is secured the knuckle 2. The knuckle 2 consists of the base or securing plate 3, provided at its rear end with a square opening 4, through which is passed a bolt 5, the square end of the bolt taking within the opening and the cylindrical portion thereof passing through the beam 1, and serving as a pivot for the raising and lowering of the opposite

end of the knuckle, which latter has the front end of its plate provided with a transverse curved slot 6, through which and an opening 55 in the beam there is passed an adjusting-bolt 7, by which said knuckle when swung upward or downward upon its pivot may be tightly clamped in position, and thus, it will hereinafter appear, will raise or lower the 60 point of the shovel, so as to take more or less deeply into the ground.

From the opposite parallel edges of the plate 3 there project upper and lower ears or flanges 8 and 9. The rear end of the upper 65 flange 8 has its edge extended and curved and concentric with bearing-openings 10, formed in the flanges 8 and 9, said curved edge having its upper face provided with a concentric series of teeth or notches 11. 70

12 represents the shovel post or standard, to the lower end of which there is secured in any well-known manner the shovel 13. The lower opening 10 is of a diameter adapted to receive the cylindrical portion of the post 12, 75 and the upper opening 10 is of a diameter to receive the reduced upper portion 14 of said post, the intermediate shoulder 15, caused by the reduced portion 14, bearing upon the under surface of the upper flange 8. The 80 extreme upper end of the post 12 is flattened at opposite sides, as at 15*, and receiving the same is an opening 16, agreeing therewith and formed in the end of a lever 17, the outer half of which is upwardly disposed, as 85 at 18. The lever is provided with an opening 19, in line with the teeth 11, formed in the flange 8, and through said opening and engaging the teeth is a lug 20, formed upon the under side of a spring-latch 21, which 90 latch is seated in a recess 22, formed in the upper face of the lever 17, and has its opposite end bifurcated, as at 23, to straddle the flattened portions 15, and a small lug 24, whereby the spring-latch is maintained in 95 perfect parallelism with the lever 17 and in line with the recess 22, the walls of which opposite the post 12 are cut away. The recess 22 is continued throughout the length of the handle 17 and its upwardly-disposed portion 100 18, and mounted therein is a latch-operating lever 25, provided with a lug 26 upon its under surface, which takes into an opening 27, formed in the handle 17, and through which

and the walls of the opening there is passed a pivot 28. Beyond said pivot the lever terminates in a finger 29, which takes under an extension or shoulder 30, formed upon the adjacent end of the spring-latch 21 in front of its lug 20. The upper end of the post 12 is still further reduced and threaded, as at 31, and threaded thereon is a nut 32, having a tail 33, and its upper surface provided with a series of diametrically-disposed recesses 34, either pair of which is adapted to be thrown into line with a perforation 36, formed transversely in the threaded portion 31 of the post 12.

From the above construction it will be apparent that by depressing the lever 25 an elevation of the dog 20 of the spring-latch from engagement with the teeth 11 will take place, and that the lever 17 may be moved so that the dog will take into any one of a series of notches 11, and in this manner partially rotate the shovel-post.

A further advantage is that the shovel-post may be detached readily from the plow without the use of a wrench.

Heretofore numerous methods for turning the shovel-post have been employed, principal among which was by loosening the nuts binding the post to the beam. Such methods as this one mentioned required a stoppage of the plow, a loosening of the nut, a turning of the post, and a resetting of the nut.

The invention is particularly adapted for hillside plowing, wherein you set your shovels straight at one end of the field, where the ground is, for instance, level; but as soon as the hillside is reached the downhill-shovels will remove the earth away from the corn, leaving the roots exposed, while the uphill-shovels are so inclined as to cover the corn, if it be young. By my invention, however, when the hillside is reached, the operator can raise the hillside-shovels one or two notches, so as to make less depth of earth engaged, then turn both shovels uphill, which compels the earth to work in that direction instead of an opposite direction.

Very often it is necessary for farmers to plant a few rows of potatoes on the side, ends, or corners of their corn-fields, and when it is time for banking or hilling the driver may, without stopping his team, bank or hill the potatoes at the ends of the rows of corn, and then turn the plow, and by operating his levers so dispose said plows or shovels as to adapt them for cultivating corn.

Referring to Fig. 9, wherein I have shown my invention applied to the rear end of the iron beam of an ordinary corn-sulky, 38 represents the beam, to which is pivotally bolted, as at 39, the opposite securing-plates 40 of the knuckle, which plates embrace the sides of the beam and may be adjusted upon their pivot by set-bolts 41. From the rear ends of the plates project the upper and lower semi-circular flanges 42 and 43, respectively, the periphery of the former being provided with

the locking-notches 44. In these flanges is pivotally mounted the shovel-post 45, the same being in this instance flat. The remainder of the knuckle and its locking mechanism is a counterpart of that previously described, and a detailed description is therefore deemed unnecessary. The operation and advantages are also the same.

Having thus described my invention, what I claim is—

1. The combination, with a plow-beam, of a shovel-standard swiveled therein, said standard having a squared portion in its upper end and above said upper end terminating in a threaded reduced portion of a curved locking-plate concentric with the post or standard, a lever having an opening to receive the squared portion of the standard and having an opening in line with the notched locking-plate, a spring-latch secured to the pivoted end of the lever and provided with a dog in rear of its front end and projecting through the opening of the handle-lever, and a latch-operating lever pivoted in the handle-lever and having its front end terminating under a shoulder formed at the inner end of the latch, substantially as specified.

2. The combination, with a plow-beam, of a knuckle pivoted thereto and provided with opposite parallel horizontal flanges having bearing-openings opposite each other and the upper flange provided with a series of locking-notches concentric with its bearing-opening, a shovel-post of cylindrical shape mounted in the bearings and having a squared portion near its upper end and beyond the same terminating in a reduced threaded portion, a standard-operating lever having an opening fitting the squared portion and its upper surface recessed throughout its length, a spring-latch having a dog or locking-lug projected through an opening in the handle and adapted to engage the notches and at its opposite end bifurcated to receive the squared portion of the standard and mounted within the recess of the handle, a lever pivoted in the upper end of the recess and having its inner end terminating under and depressed by the shoulder of the latch, and a binding-nut mounted on the reduced threaded portion of the standard, substantially as specified.

3. The combination, with the beam 1, of the plate 3, having the openings 4 and 6 and the binding-bolts mounted therein, and having the opposite flanges 8, having bearings 10, vertically opposite each other, the upper flange being provided with a concentric series of locking-notches 11, the post 12, mounted in the openings 10 and having the reduced portions 14, 15, and 31, the lever 17, upwardly disposed, as at 18, recessed, as at 22, on its upper face, having the opening 16 to receive the portion 15 of the shaft, and provided with the lug 16, the flat spring-latch 21, having the lug 20, projecting through the lever 17 and engaging the notches, and at its opposite end provided with the bifurcations 23, the lever

25, pivoted, as at 28, in the recess 22, and having its forward end engaging a shoulder 30 of the spring-latch, the tail-nut 32, having the tail 33, radial recesses 34, and the pin 37, 5 inserted through a perforation in the upper end of the standard and seated in a pair of the recesses, substantially as specified.

4. The combination, with a plow-beam, of a knuckle secured thereto and comprising a 10 securing-plate and upper and lower flanges, one of which is provided with a series of locking-notches, a shovel-post pivoted in the

flanges, a post-operating lever mounted on the post, and a spring locking-latch mounted on the lever and adapted to engage the notches, 15 substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

W. H. PRISK.

Witnesses:

JOHN RICHARDS,
HENRY KELLER.