

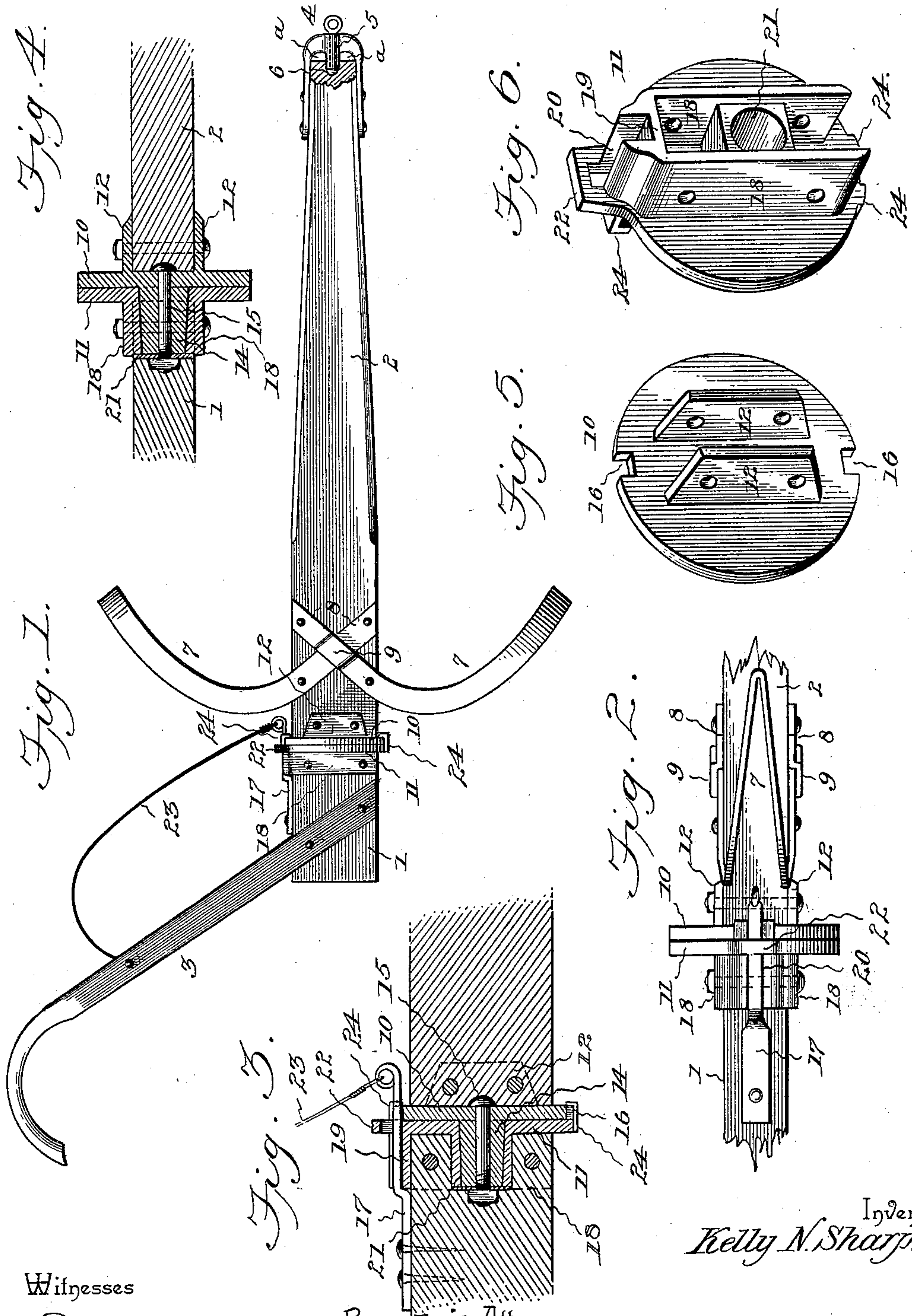
No. 613,727.

Patented Nov. 8, 1898.

K. N. SHARP.
PLOW.

(Application filed Oct. 25, 1897.)

(No Model.)



Witnesses

E. N. Munn

V. B. Hillyard.

By *his Attorneys,*

C. A. Snow & Co.

Inventor
Kelly N. Sharp.

UNITED STATES PATENT OFFICE.

KELLY NEWTON SHARP, OF HARMONY GROVE, GEORGIA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 613,727, dated November 8, 1898.

Application filed October 25, 1897. Serial No. 656,304. (No model.)

To all whom it may concern:

Be it known that I, KELLY NEWTON SHARP, a citizen of the United States, residing at Harmony Grove, in the county of Jackson and State of Georgia, have invented a new and useful Plow, of which the following is a specification.

This invention relates to plows in which the beam is made reversible, so as to bring either a right or a left hand plow in working position, a large or a small plow, or a plow or a cultivator shovel into position, according to the condition of the soil or the nature of the work to be performed.

The purpose of the improvement is to provide simple and effective means for connecting the parts of the beam, whereby the front portion bearing the earth-treating devices can be turned so as to bring either size or style of shovel or plow into active operation, and whereby the parts are secured firmly in the adjusted position and a stout joint is had between them.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a plow, showing the application of the invention, the shovels being omitted. Fig. 2 is a top plan view of the inner portion of the plow-beam. Fig. 3 is a vertical longitudinal section of the contiguous end portions of the beam-sections. Fig. 4 is a horizontal section thereof. Fig. 5 is a detail view in perspective of the front plate. Fig. 6 is a detail view in perspective of the rear plate.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by the same reference characters.

The beam is composed of a rear part or section 1 and a front part or section 2, which is rotatable relatively to the rear part, which latter is fixed and carries the handles 3. The

clevis 4 is applied to the front end of the rotatable part 2, and consists of a strap having its end portions embracing the top and bottom sides of the beam and secured thereto, and an intermediate bearing 5, having its rear end entering an opening in the end of the beam and providing loops or eyes *a*, to either one of which the draft may be applied, according to the required pitch to be given to the plow-point. An eyebolt 6 has swivel connection with the bearing 5 to admit of the front part of the beam turning without twisting the traces to which the singletree is attached and which is coupled to the said eyebolt. The standards 7 are of like formation and are adapted to receive the one a right-hand and the other a left-hand plow or plows of different styles and sizes, or a plow and a cultivator, whereby upon turning the front part of the beam either one of the two earth-treating devices may be brought into position for active service. The beam ends of the standards incline forwardly, as shown at 8, and cross, the outer ends being offset, as shown at 9, to clear the inner ends and admit of the standards being adjusted to give the proper pitch to the shovels or plow-points. Each standard is composed of corresponding side members of like formation, and the corresponding side members are clamped against the opposite sides of the beam by bolts passing through transversely-alining openings in the overlapping end portions upon opposite sides of the point of crossing.

Circular plates or disks 10 and 11 are secured to the contiguous ends of the beam-sections 1 and 2 in the following manner: The front plate of disk 10 is formed with parallel flanges 12, which embrace the sides of the front part 2 and are secured thereto by bolts passing through pairs of openings formed in the flanges and in transverse alinement. A journal 14 is formed centrally on the rear face or side of the plate and has an opening through which passes a bolt 15, by means of which the two plates are connected. Notches 16 are formed in the upper and lower edges of the plate 10 and cooperate with a spring-catch 17 to hold the beam-section 2 in an adjusted position. The rear plate 11 has parallel flanges 18 on its rear side, which embrace the sides of the fixed section 1 and are bolted thereto.

These flanges are connected at their upper ends by a transverse flange 19, which overlaps the top side of the part 1, and this flange has a longitudinal groove 20 in its upper side to receive the front portion of the catch 17 and brace it laterally. The side flanges 18 are connected intermediate of their ends by a filling which is centrally bored to receive the journal 14 and form a bearing 21 therefor. The bore of the bearing 21 and the journal 14 are of tapering form, whereby a snug joint is secured to prevent lost motion. A loop or apertured extension 22 is formed at the upper edge of the plate 11 about in line with the space formed between the flanges 18 and directly in line with the longitudinal groove 20 and receives the front end of the catch 17. The bolt 15 for connecting the two plates passes through the journal 14, and the head or nut at its rear end is of a size to overlap the rear end of the bearing 21, so as to hold the two plates together. It will be understood that the plates are coupled prior to attaching them to the respective parts of the beam.

The catch 17, which is a stout flat spring, is secured at its rear end to the part 1, and its front end operates through the loop 22 and is adapted to enter one of the notches 16, so as to hold the parts 1 and 2 in position. A wire 23 or like connection is secured to the front end of the catch 17 and extends within convenient reach, so as to be pulled upon for releasing the catch when it is desired to turn the part 2 for bringing one or the other of the earth-treating devices into working position. The upper end of the wire is secured to the top cross-bar of the handles and is sufficiently slack to bulge, so as to be grasped by the attendant.

The bolt 15 and journal 14 are supplemented in their action by hooks 24, which project beyond the front face of the rear plate 11 and embrace the edge portion of the front plate 10. These hooks are provided in upper and lower pairs and are disposed to come upon opposite sides of the notches 16. As is obvious, the hooks 24 serve to hold the plates 10 and 11 together and guide them materially in

their relative turning and preclude any binding action between the journal 14 and its bearing 21.

Having thus described the invention, what is claimed as new is—

1. In a reversible plow, a divided beam having alined sections, opposing plates rigidly fitted to the contiguous ends of the beam-sections and flatly abutting, one of said plates being provided with a central bearing, and the other plate having projected therefrom a central journal registering in said bearing, a separate fastening for holding the two plates together in pivotal relation, and a locking device for the beam-sections, substantially as set forth.

2. In a reversible plow, a divided beam having alined sections, opposing flatly-abutting plates fitted to the contiguous ends of the beam-sections, and both provided at one side with offstanding flanges embracing such sections, one of said plates being provided with peripheral notches, and the other plate having an elongated groove and a loop spanning the same, a central pivotal connection for the two plates, and a catch operating within the said elongated groove beneath the loop and adapted to engage the peripheral notches in one of the plates, substantially as set forth.

3. In a reversible plow, a divided beam having alined sections, opposing plates rigidly fitted to the contiguous ends of the beam-sections and flatly abutting, one of said plates being provided with a central offset bearing seated in one of the beam-sections and having a tapered bore, and the other plate having projecting from one side thereof a central tapered journal registering in the tapered bore of said bearing, a bolt passing through the journal and holding the two plates together in pivotal relation, and a locking device for the beam-sections, substantially as set forth.

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

KELLY NEWTON SHARP.

Witnesses:

P. W. SHEPPARD,
G. L. CARSON, Jr.