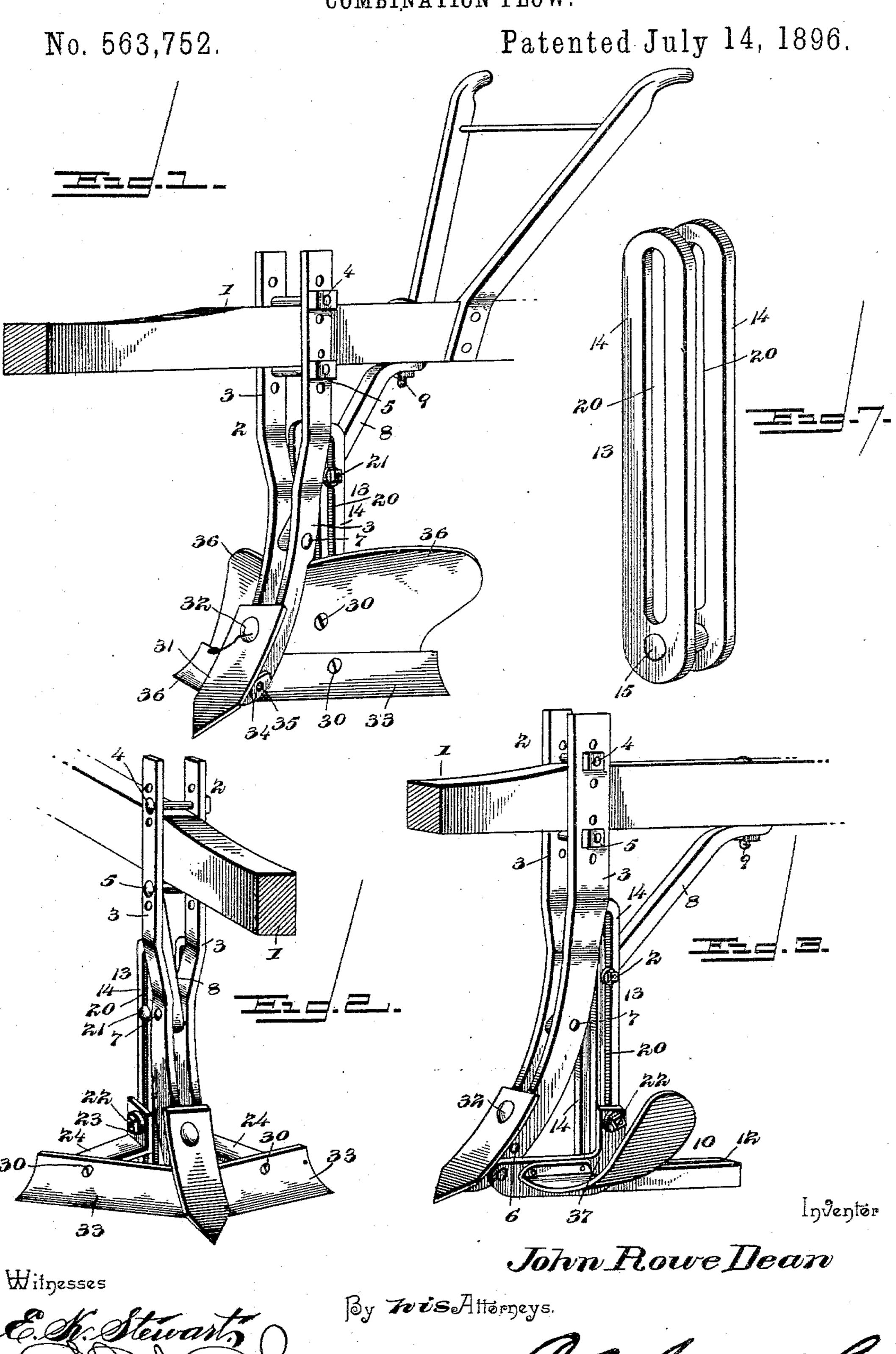
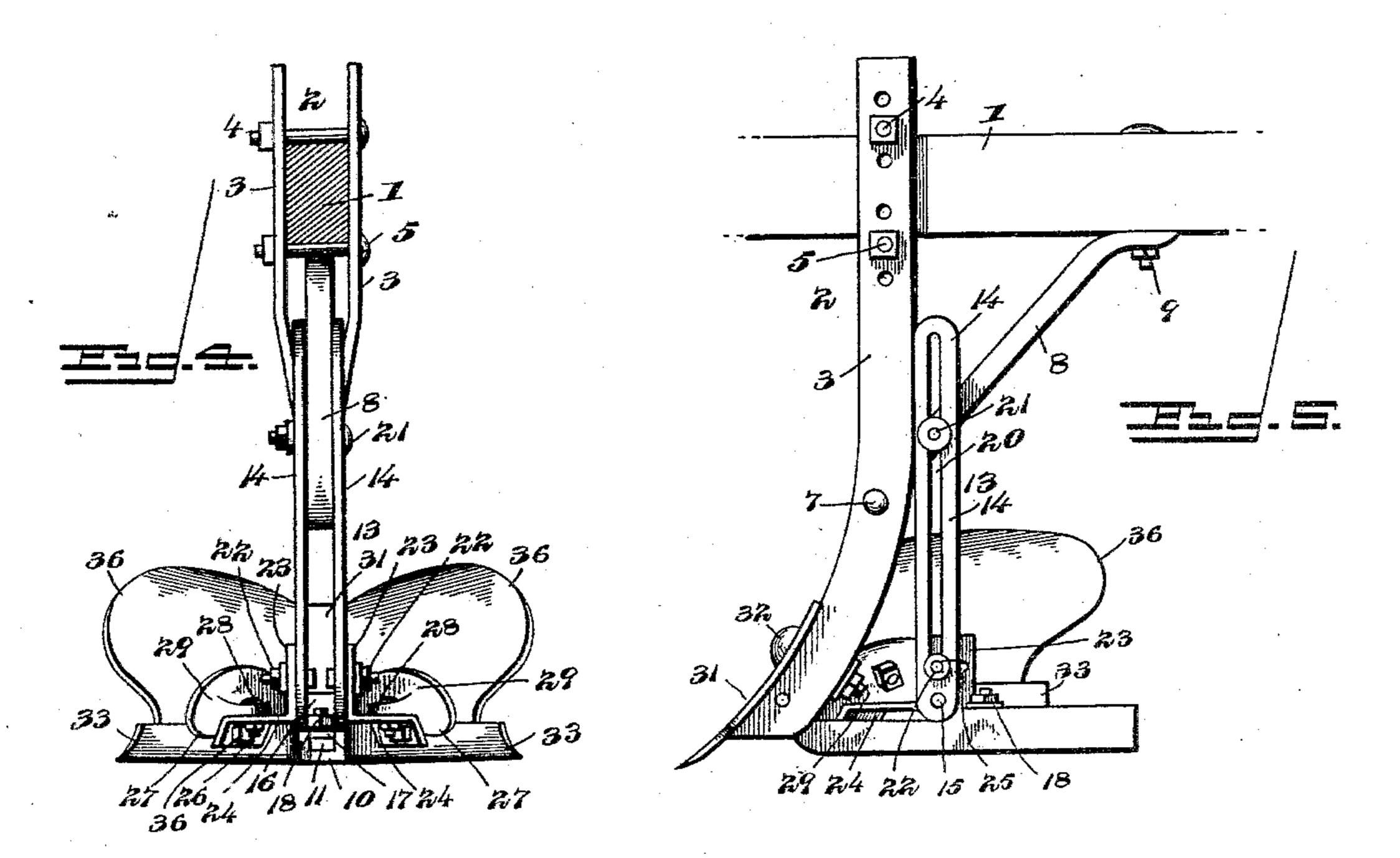
## J. R. DEAN. COMBINATION PLOW.

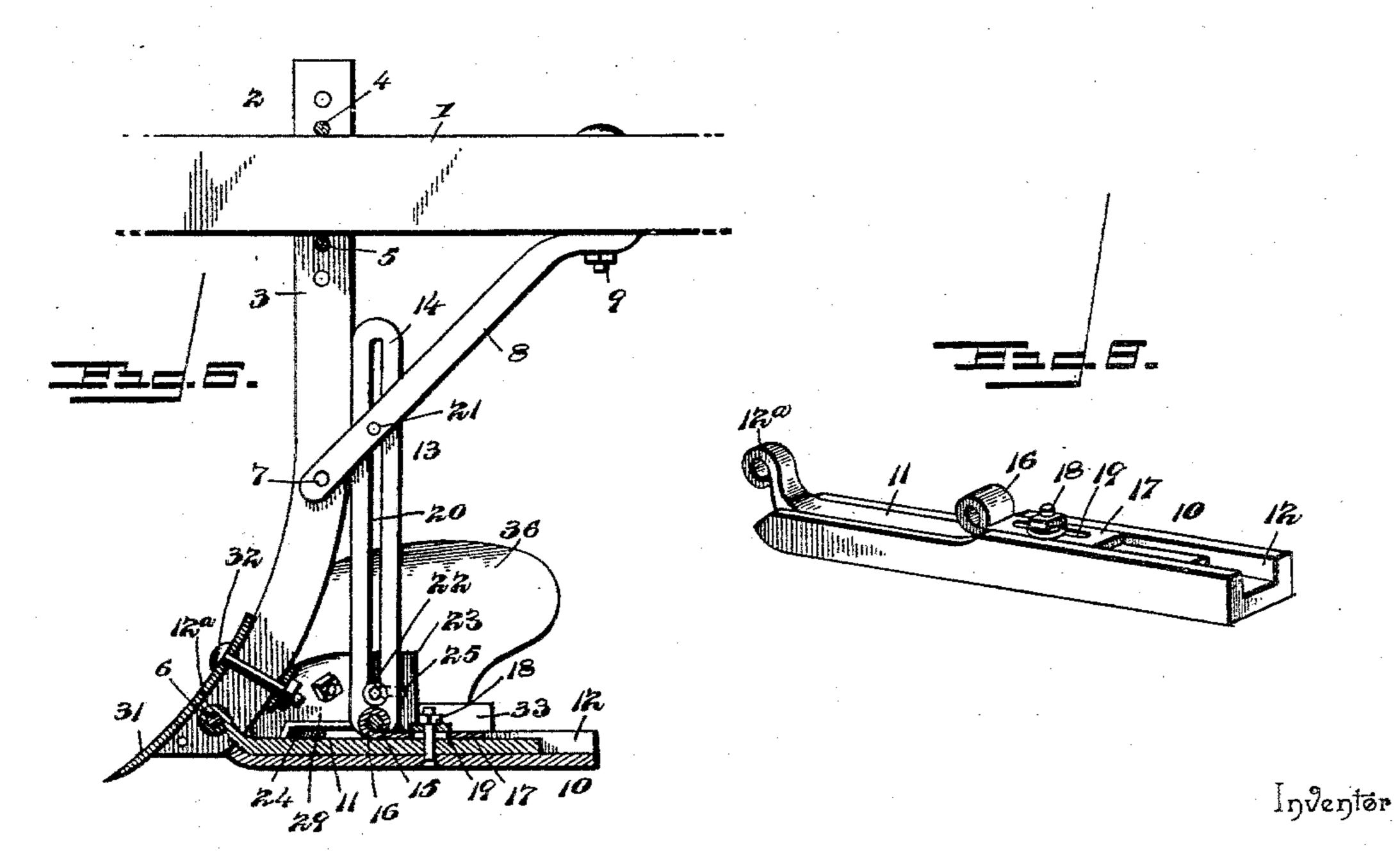


## J. R. DEAN. COMBINATION PLOW.

No. 563,752.

Patented July 14, 1896.





Witnesses

E. A. Stewart

John Rowe Dean
By Wis Attemptys,

alamonto.

## United States Patent Office.

JOHN ROWE DEAN, OF SULPHUR SPRINGS, TEXAS, ASSIGNOR OF ONE-HALF TO J. G. STEVENSON, P. F. GULLY, AND J. P. HIGHTOWER, OF SUMMER-FIELD, LOUISIANA.

## COMBINATION-PLOW.

SPECIFICATION forming part of Letters Patent No. 563,752, dated July 14, 1896.

Application filed June 12, 1895. Serial No. 552, 566. (No model.)

To all whom it may concern:

Be it known that I, John Rowe Dean, a citizen of the United States, residing at Sulphur Springs, in the county of Hopkins and State of Texas, have invented a new and useful Combination-Plow, of which the following is a specification.

My invention relates to plows; and it has for its object to provide an improved construction and arrangement of parts which may be combined with facility to form a variety of plows designed for work of different kinds, the present invention being an improvement upon that shown and described in Patent No. 15 492,462, granted to me February 28, 1893.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

view of a right and left turn plow arranged to form a middle breaker. Fig. 2 is a right and left heel-sweep. Fig. 3 shows a cotton-scraper arranged upon the stock. Fig. 4 is a rear view of the construction shown in Fig. 1. Fig. 5 is a side view of the same with the blades upon the near side removed. Fig. 6 is a similar view, partly in section. Fig. 7 is a detail view of the slotted link for holding the landside in the proper position. Fig. 8 is a detail view in perspective of the landside and the means whereby it is connected to the plow-stock and the adjusting-link.

Similar numerals of reference indicate cor-35 responding parts in all the figures of the draw-

1 designates a beam, to which is secured the stock 2, comprising approximately parallel side bars 3, which are secured to the plowbeam by means of transverse bolts 4 and 5 engaging registering perforations in said bars, respectively, above and below the plane of the beam, a plurality of openings being formed in the bars to provide for arranging the bolts contiguous to the upper and lower surfaces of the beam. These side bars of the stock are connected near their lower ends by a transverse rivet 6 and at an intermediate point by a rivet 7, to which is connected the lower end

of an inclined brace S. Said brace is bolted 50 at its upper end, as shown at 9, to the plowbeam in rear of the stock.

Loosely connected at its front end to the plow-stock is a landside 10, the means of connection including a metal strap 11, ar- 55 ranged in a longitudinal channel 12 in said landside and provided at its front end with a hook 12 for engagement with the transverse rivet or pin 6 at the lower end of the stock. This attachment provides for adjusting the 60 landside to vary the depression of the nose of the plow, and the landside is held at the desired adjustment by means of a link 13, having parallel side arms 14, arranged, respectively, upon opposite sides of the plane of the 65 inclined brace and pivotally connected at their lower ends to the landside. Said arms of the link are connected at their lower ends by a transverse pin 15, mounted in a bearing 16 at the front end of a strap 17. This strap 7° 17 is arranged upon the strap 11, and is secured in place within the channel of the landside by the same bolt 18 which secures said strap 11, the strap 17 being longitudinally slotted, as shown at 19, to provide for adjusting the 75 lower end of the link forwardly and rearwardly upon the landside to insure holding the parts firmly in their operative positions. The arms of the link are slotted, as shown at 20, for engagement by a locking-bolt 21, ar- 80 ranged in the inclined brace.

The slots in the arms of the link serve an additional function in that they provide for the engagement of bolts 22, by which the wing-supporting brackets 23 are held in place. 85 Said brackets are provided with bases 24, having longitudinal slots 25 for engagement by said bolts, whereby the brackets may be adjusted forwardly and rearwardly, and the wings are secured to the bracket, and hence 90 are adjustable therewith. The upper wings are bolted, as shown at 26, to holding-plates 27, said holding-plates having ears 28, which are in turn bolted to the brackets, and the brackets are provided at their outer extremi- 95 ties with ears 29, to which the heel-sweep wings are secured by means of bolts 30.

In Fig. 1 I have shown the plow adjusted

for right and left turning, in which case the toe or shovel 31 is secured by means of a bolt 32 passing between the side bars of the stock. A heel-sweep wing 33 is arranged upon each 5 side of the stock, with the ear 34 secured by a bolt 35 to the lower extremity of the contiguous side bar, and with its body portion secured to the terminal ear on the adjacent wing-supporting bracket, and arranged above 10 each heel-sweep wing is a moldboard 36. In Fig. 2 I have shown the toe or shovel and the right and left heel-sweeps thus forming a heelsweep complete, and in Fig. 3 I have shown the plow adapted for cotton scraping, in which 15 the blade 37 is bolted at its front end to the lower end of the adjacent side bar and at its rear end to the contiguous arm of the link.

From the above description it will be seen that the wings are detachable, adjustable, and 20 interchangeable, and by the use of blades or wings of different kinds the plow may be adapted as an ordinary shovel-plow, with or without a landside, a right or left turn plow, a right and left or double turn plow, a right or 25 left half solid sweep, a complete solid sweep, a right or left heel-sweep, a heel-sweep complete, a right or left solid sweep, a double solid sweep, and various combinations of these arrangements, such as a turn-plow on 30 one side and a heel-sweep or solid sweep on the other, &c.

In the drawings I have shown only a toe or shovel, a heel-sweep, and a moldboard; but it is obvious that wings of other shapes, includ-35 ing those in common use, may be employed, but it is deemed unnecessary to illustrate the same in this connection.

Various changes in the form, proportion, and the minor details of construction may be 40 resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. The combination with a plow-beam, of a stock having twin approximately parallel side bars connected at their lower ends and at intermediate points by transverse pins or rivets and provided at their upper ends with 50 registering openings, bolts engaging said openings, respectively, above and below the plane of the beam, an inclined brace attached at its lower front end to an intermediate pin or stud between the side bars of the 55 stock, a landside carrying a hook engaging the pin or stud between the lower extremities of the side bars, and means for securing the rear end of the landside in the desired position, substantially as specified.

2. The combination with a stock having parallel side bars connected at their lower ends by a transverse pin, of a landside, a strap secured to the landside and engaging the pin between the side bars of the stock, a 65 link pivotally connected to the landside at an intermediate point, and means for secur-

ing the link at the desired adjustment, substantially as specified.

3. The combination with a stock, of a landside provided in its upper side with a long- 70 tudinal channel, a strap removably seated in said channel and provided at its front end with a hook engaging a transverse pin on the stock, whereby the strap is protected at its sides and bottom by the seat in the land- 75 side, a link pivotally connected to the landside at an intermediate point, and means for securing the link at the desired vertical actjustment, substantially as specified.

4. The combination with a stock, of a land-80 side pivotally connected at its front end to the stock a slotted strap bolted to the landside and capable of longitudinal adjustment thereon, said strap being provided with a bearing, a link having a transverse pin mount- 85 ed in said bearing, whereby the pivotal point of connection of the link with the landside is adjustable, and means for securing the link at the desired vertical adjustment, substantially as specified.

5. The combination with a stock, of a landside pivotally connected at its front end to the stock, a link pivotally connected to the landside, means for adjusting the point of connection of the link to the landside, and 95 locking devices for securing the link at the desired adjustment, substantially as speci-

fied. 6. The combination with a stock, and a rearwardly and upwardly inclined brace attached 100 thereto, of a landside pivotally connected to the stock, a link pivotally connected to the landside and provided with parallel slotted arms arranged, respectively, upon the opposite sides of the plane of said brace, and a 105 bolt carried by the brace and engaging the slots in the arms of the link, substantially as specified.

7. The combination with a stock, of a landside pivotally connected at its front end to 110 the stock, a link connected to an intermediate point of the landside and having parallel slotted arms, means for securing the link at the desired vertical adjustment, and wingsupporting brackets secured to the arms or 115 the link by bolts engaging the slots in the latter, substantially as specified.

8. The combination with a stock, of a landside pivotally connected to the stock, a link connected to an intermediate point of the 120 landside and having parallel slotted arms, wing-supporting brackets having horizontal slots, and bolts engaging the slots in the brackets and the slots in the arms of the link at the points of registration, whereby said 125 brackets are capable of vertical and horizontal adjustment, substantially as specified.

9. The combination with a stock having side bars provided at their lower extremities with bolt-openings, a landside pivotally con- 130 nected to the stock, a link connected to an intermediate point of the landside and pro-

vided with slotted arms, means for securing the link at the desired vertical adjustment, brackets having horizontal slots adapted to register with the slots in the arms of the link, nuts engaging the registering portions of said slots, and wing-holders bolted to the brackets, substantially as specified.

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

JOHN ROWE DEAN.

Witnesses:

T. C. McCorkle, W. I. BIMKER.