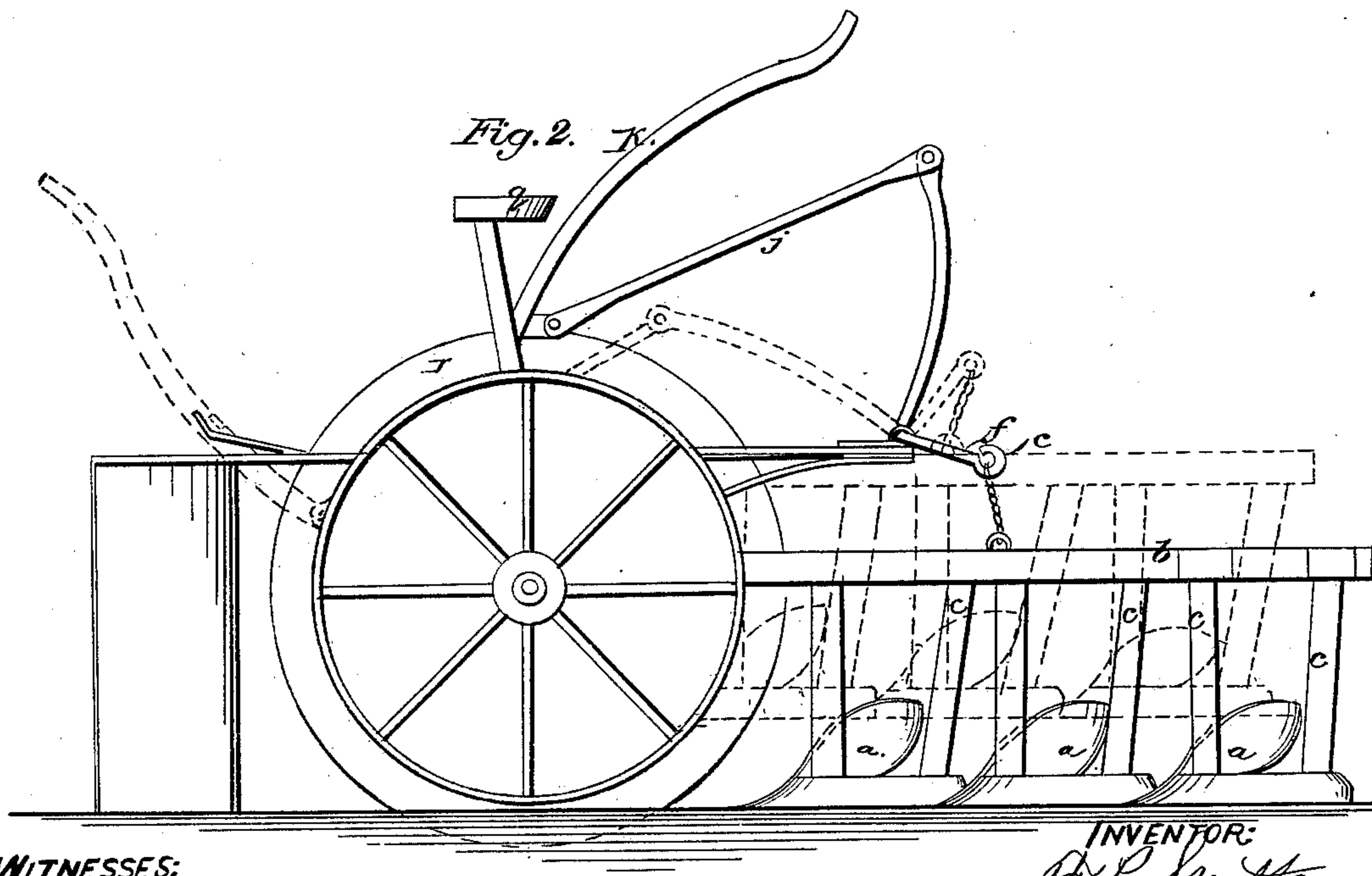
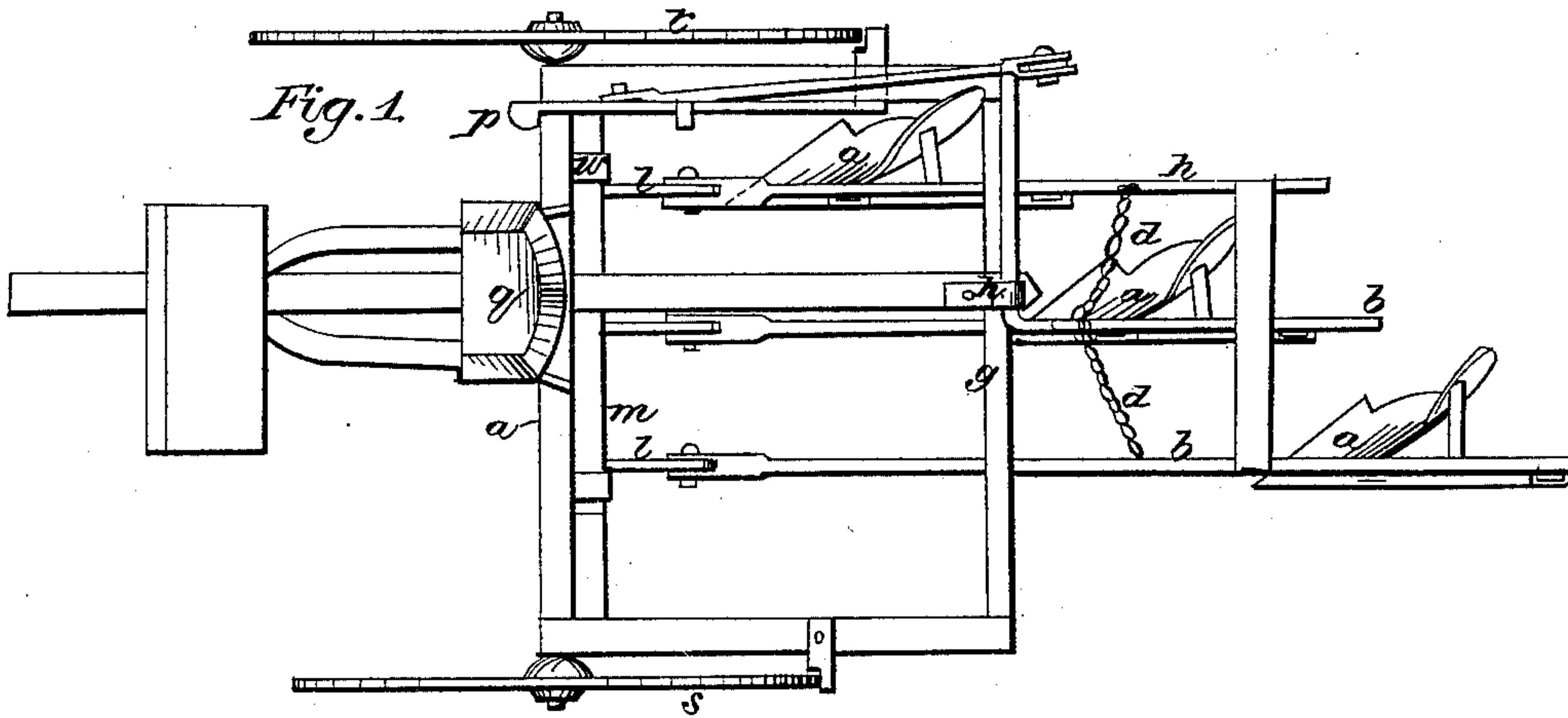


F. P. SMITH.

Wheel Plow.

No. 82,166.

Patented Sept. 15, 1868.



WITNESSES:  
J. Smith.  
L. E. Jones.

INVENTOR:  
F. P. Smith  
per Wm. D. Crockett  
Attorney

# United States Patent Office.

F. P. SMITH, OF PETALUMA, CALIFORNIA.

*Letters Patent No. 82,166, dated September 15, 1868.*

## IMPROVEMENT IN GANG-PLOWS.

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

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, F. P. SMITH, of Petaluma, in the county of Sonoma, and State of California, have invented a certain new and useful Improvement on Gang-Plows; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and to the letters and marks thereon, which said drawings form part of this specification, and represent a plow constructed under my invention—

Figure 1 being a top view, and

Figure 2 being a side view of such plow.

In each of these figures, like marks and letters are used to indicate like parts.

My invention relates more particularly to the manner of connecting the plows to the axle and lever, and to the lever and chains, for raising and lowering the plows.

The plows *a* are connected to the beams *b* by the standards *c*, which beams, by means of the chains *d*, are attached to the eye *e* of the lever *f*. This lever *f* is bent at right angles to the eye-part, so as to rest upon the frame-bar *g*, to which it is connected by eye-bolts or plates *h*, in which it has motion. The lever *f* then turns upward, *i*, and is attached to a connecting-rod, *j*, the front end of the rod *j* being pivoted to the hand-lever *k*. The front ends of the plow-beams are pivoted to the crank-arms *l* of the shaft *m*. Shaft *m* is, by the straps *n*, attached to the axle *o*. The hand-lever *k* is bent around at its lower end, *p*, and affixed to the shaft *m*. Now, it will readily be seen that, when the hand-lever *k* is thrown forward, the crank-arms *l* will be thrown upwards and forwards, and the end, *i*, of the lever *f* will be thrown forward, giving to the eye-part an upward and forward motion, so that the plows, when being moved up from the ground, are also moved forward towards the axle, and the plow-beams are brought closely and snugly up to the frame-bars. An upward and backward movement of the hand-lever *k* lowers the plows down to the position for plowing. The two conditions of the plows, and the means for raising and lowering them, are shown by fig. 2, the one in red lines, and the other in blue color.

This arrangement of means for attaching the plows to the frame, and for operating them, while simple, is very useful, particularly as regards the snug fitting of the plow-beams under the frame-bars when moving the machine from one locality to another.

The driver's seat is marked *q*, the furrow-wheel *r*, and the land or unbroken-soil wheel *s*.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the several means and devices herein set forth, for raising and lowering the plows.

This specification signed, this 31st day of March, 1868.

F. P. SMITH.

Witnesses:

WILLIAM HENRY BROWN,  
SAMUEL L. PALMER.