

(No Model.)

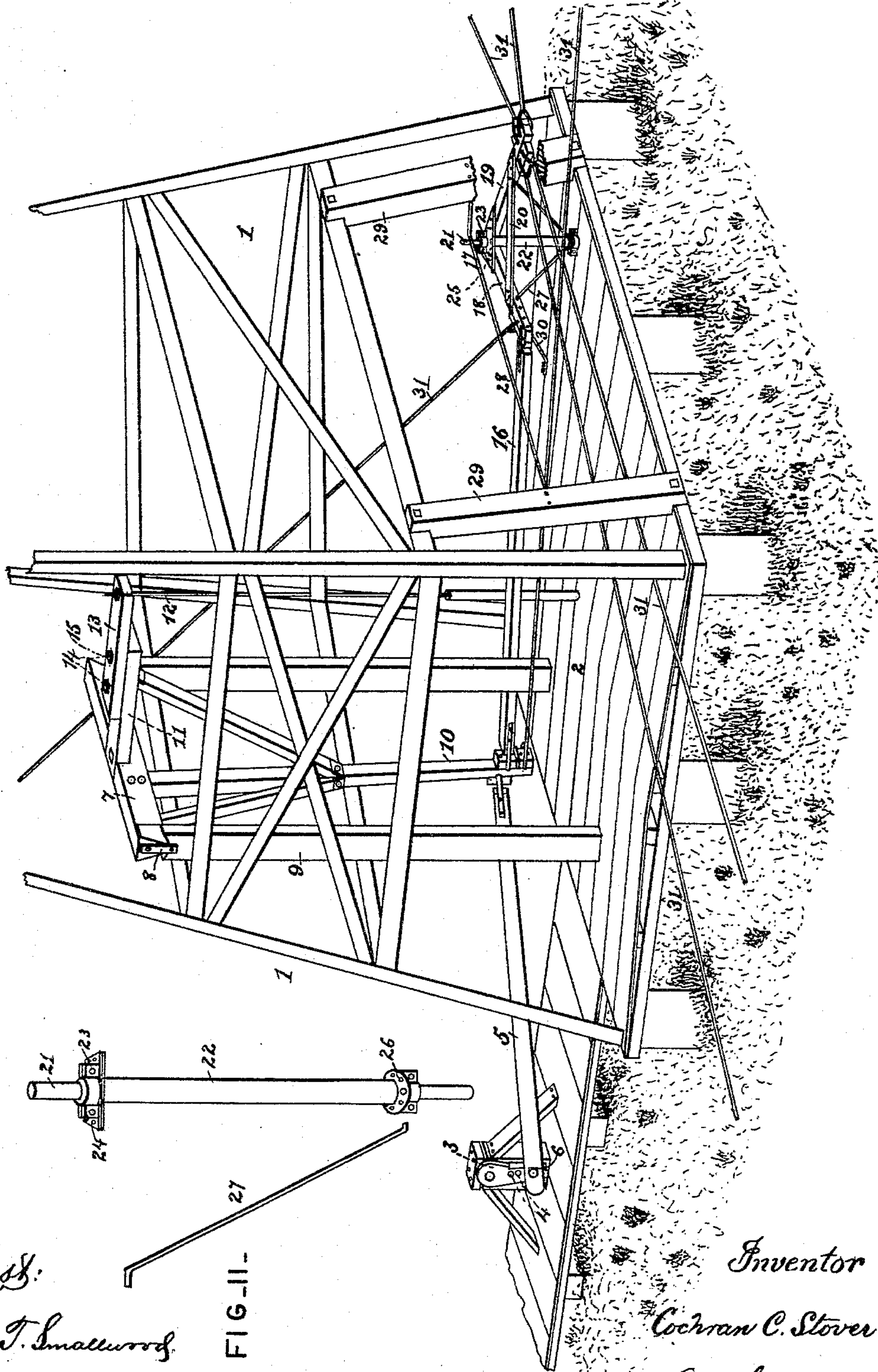
C. C. STOVER.

CONNECTING DEVICE FOR WELL PUMPING RIGS.

No. 412,136.

Patented Oct. 1, 1889.

FIG. I.-



Attest:

Geo. T. Smallwood.

Geo. L. Wheelock.

FIG. II.-

Inventor

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UNITED STATES PATENT OFFICE.

COCHRAN C. STOVER, OF BRADFORD, ASSIGNOR OF ONE-HALF TO JOHN J. B. FINK, OF PITTSBURG, PENNSYLVANIA.

CONNECTING DEVICE FOR WELL-PUMPING RIGS.

SPECIFICATION forming part of Letters Patent No. 412,136, dated October 1, 1889.

Application filed June 14, 1888. Serial No. 277,047. (No model.)

To all whom it may concern:

Be it known that I, COCHRAN C. STOVER, a citizen of the United States, residing at Bradford, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Connecting Devices for Well-Pumping Rigs, of which the following is a specification.

My invention has for its object the constructing of a strong and effective device whereto the rods or arms of other wells may be connected for operation by a single motor.

My invention consists in features of novelty, to be hereinafter described, and then particularly pointed out in the claim; and in order to gain a clear understanding thereof reference may be had to the accompanying drawings, in which—

Figure I is a perspective view of a complete rig embodying my invention. Fig. II is a perspective view of the upright bar fastened to the derrick-sill and on which the hollow shaft carrying the bell-crank lever is journaled.

I will first describe briefly the well-known parts of a well-pumping rig in order to gain a clear understanding of my improvements, and I will then describe the latter.

Referring to the drawings, 1 represents the derrick, and 2 its sill or platform.

3 represents a crank, which may be operated by any suitable device, as a band-wheel or windlass, and which is provided with pins or bolts 4 for shortening the length of stroke of pitman 5, from either of which pins it may be operated when they occupy its slot 6.

7 is the rocking beam, which is pivoted to the brackets 8 of uprights or standards 9. Extending downwardly from the rocking beam is its pendulum 10, to which is connected the pitman 5. Beam 11 13 is fixed to the rocking beam 7 for the operation of the polish-rod 12, which is attached to it.

I will now describe my present improvements.

16 is a connecting-rod between the lower end of the pendulum and one arm 18 of the large bell-crank 17, of which 19 is the other arm. These arms are braced by means of a connecting-piece 20.

The bell-crank is mounted as follows: 21

is an upright rod fixed to the platform 2 of the derrick, and journaled thereon is a hollow oscillating shaft or tube 22. At the upper end of this hollow shaft is fixed a clamping-bracket 23, having a perforated base-plate 24, to which is fixed by bolts or rivets the angle-brace 25 of the bell-crank 17. I call this an "angle-brace" for the reason that it is attached at the angle formed by the meeting ends of the arms of the bell-crank.

26 is a casting fixed to the lower end of tube 22, and which is perforated for the insertion of the braces 27, which are bolted to the arms 18 and 19 of the bell-crank.

28 is a brace fixed to the bull-wheel posts 29, to which brace is fastened the upper end of the upright rod or bar 21. The rod 21 is also braced by a brace 30, secured to its upper end and to the platform of the derrick.

31 are any number of connecting-rods secured to the bell-crank for operating any number of wells from a single motor.

This rig is used in each and every derrick, which gives so much greater power than in other connected wells.

I am aware that it is old to construct a solid oscillating shaft for connecting up a number of wells, with radial arms wherewith the connecting-rods of the respective wells are connected; but I am not aware that previous to my invention it has ever been proposed to provide a rigid vertical rod on which journals a hollow oscillating shaft or a tube having radial arms, whereby the strain is distributed throughout the said hollow shaft for the purpose stated.

Having thus described my invention, what I claim is—

The combination of the hollow oscillating shaft 22, fixed upright rod or bar 21, on which it is journaled, bell-crank 17, fixed by means of clamping-bracket 23 to the hollow shaft, perforated castings 26, braces 27, fixed in the perforations and secured to the bell-crank, and connecting-rods 31 of any number of wells, substantially as shown and described.

COCHRAN C. STOVER.

Witnesses:

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