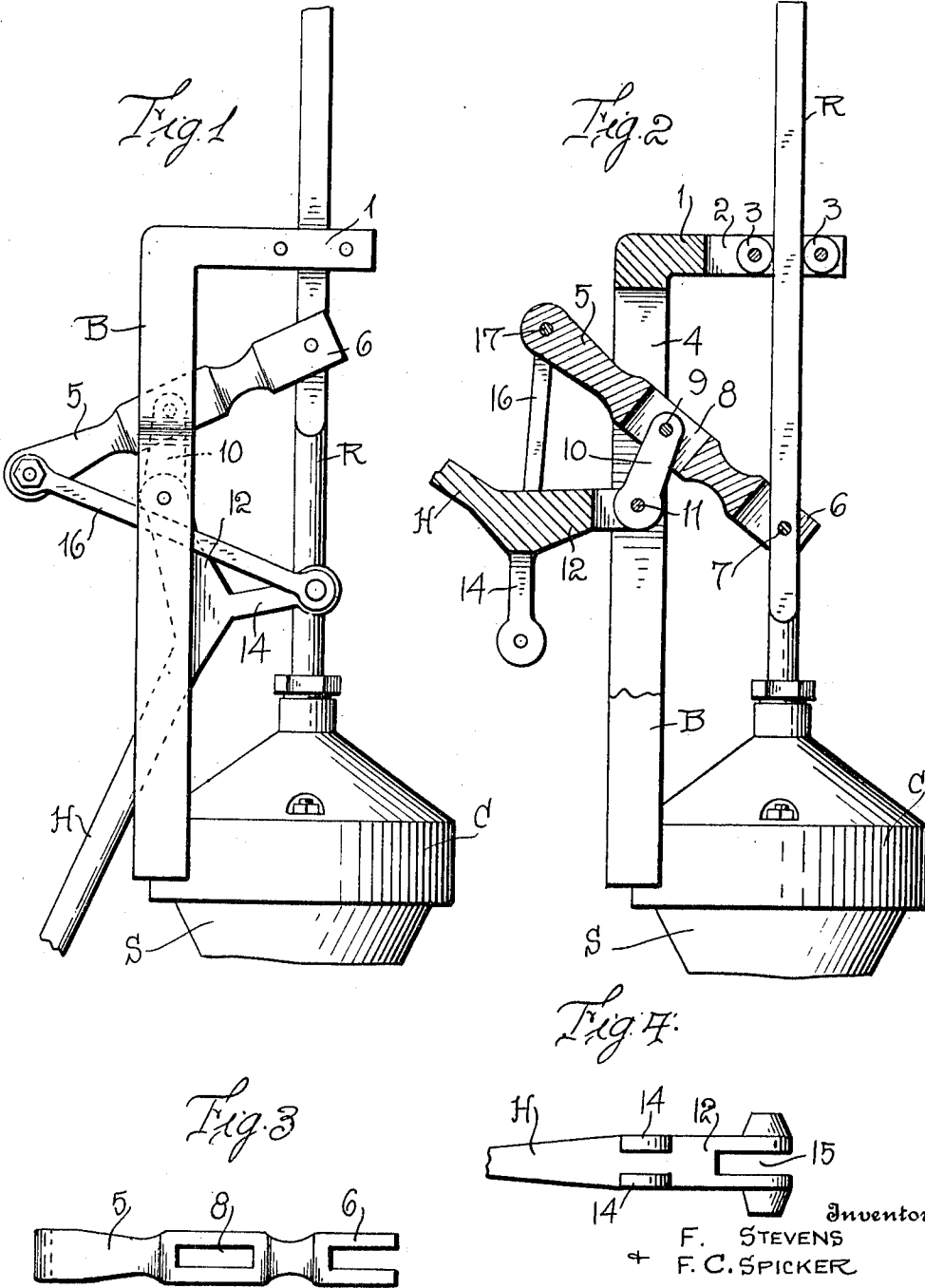


F. STEVENS & F. C. SPICKER.
PUMP OPERATING DEVICE.
APPLICATION FILED JUNE 6, 1917.

1,270,068.

Patented June 18, 1918.



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FRANK STEVENS AND FREDERICK C. SPICKER, OF ROUNDUP, MONTANA.

PUMP-OPERATING DEVICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, FRANK STEVENS and FREDERICK C. SPICKER, citizens of the United States, residing at Roundup, in the county of Musselshell and State of Montana, have invented certain new and useful Improvements in Pump-Operating Devices, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to certain improvements in pump operating devices, and has relation more particularly to a device of this general character especially designed and adapted for use in connection with a reciprocating piston.

15 It is an object of the invention to provide a novel and improved pump operating device embodying a swinging handle or lever, together with an arrangement of parts whereby the possibility of a dead center is eliminated.

20 The invention consists in the details of construction and in the combination and arrangement of the several parts of our improved pump operating device whereby certain important advantages are attained and the device is rendered simpler, less expensive and otherwise more convenient and advantageous for use, all as will be hereinafter more fully set forth.

30 The novel features of the invention will hereinafter be definitely claimed.

In order that our invention may be the better understood, we will now proceed to describe the same with reference to the accompanying drawings, wherein:

35 Figure 1 is a view in elevation, illustrating a pump operating mechanism constructed in accordance with an embodiment of our invention;

40 Fig. 2 is a view partly in elevation and partly in section, illustrating in detail certain features of the invention as herein disclosed;

45 Fig. 3 is a view in top plan, of the rod engaging lever as herein treated;

Fig. 4 is a fragmentary view in bottom plan, of an end portion of the handle or hand lever as herein embodied.

50 As herein disclosed, C' denotes a cap or head of any ordinary or preferred construction, suitably fixed to the top or upper end portion of the pump stand or casing S. R denotes a reciprocating operating rod for the pump piston. As the particular construction of the rod R and its coating pis-

ton forms no particular part of our present invention, a detailed description and illustration thereof is therefore believed to be unnecessary.

60 Fixed to the cap C is an upstanding bracket B terminating in the inwardly disposed angular extension 1. The free end portion of the extension 1 is bifurcated as indicated at 2, and rotatably supported 65 within the kerf of such bifurcation are the guide rollers 3, between which the rod R extends in a manner and for a purpose which is believed to be clearly apparent in the art to which our invention appertains.

70 A portion of the bracket B intermediate the cap or head C' and the extension 1 is slotted as at 4, and disposed through said slot is the elongated lever 5 having one end portion forked as at 6, to straddle the rod 75 R at a point below the angular extension 1 of the bracket B. The forked portion 6 is pivotally engaged as at 7 with said rod R. The central portion of the lever 5 is provided with a longitudinally disposed slot 8, 80 intersected transversely by a pin 9, with which is pivotally engaged an end portion of a rigid link 10. The opposite end portion of the link 10 is pivotally engaged with a pin 11, transversely intersecting the slot 85 4 of the bracket B at a predetermined point below the central portion of the lever 5.

H denotes an operating handle or lever provided at one end portion with diverging arms 12 and 14. The arms 14 are arranged 90 in a pair, and the outer or free end portion of the arm 12 is bifurcated as at 15, to straddle the rigid link 10 when the outer end portion of said arm 12 is pivotally 95 mounted upon the pin 11. The outer or free end of each of the arms 14 has pivotally engaged therewith a rigid link 16, which is also pivotally engaged through the medium of the pin 17 with the outer end portion of the lever 5.

100 The operation of our improved pump operating device is believed to be clearly obvious in view of the foregoing description, although it is thought to be well to mention that the pivotal mounting of the link 105 10 serves to prevent a dead center, whereby the effectiveness of our improved device and the convenience of its operation are materially increased.

110 From the foregoing description, it is thought to be obvious that a pump operating device constructed in accordance with our

invention is of an extremely simple and comparatively inexpensive nature and is particularly well adapted for use by reason of the convenience and facility with which it may be assembled, and it will also be obvious that our invention is susceptible of some change and modification without material departure from the principles and spirit thereof and for this reason we do not wish to be understood as limiting ourselves to the precise arrangement and formation of the several parts herein shown in carrying out our invention in practice, except as hereinafter claimed.

We claim:

1. In combination with a reciprocatory member and a bracket, a lever pivotally engaged at one end portion with the reciprocatory member, a rigid link pivotally supported by the bracket and pivotally engaged with the lever intermediate the length thereof, a handle member pivotally engaged with the bracket, the pivotal connection between the handle member and the bracket and the rigid link and the bracket being common, an arm carried by the pivoted end portion of the handle member and disposed in a direction away from the lever, and a rigid

link pivotally engaged with a free end portion of the arm of the operating handle and with the outer end portion of the lever.

2. In combination with a reciprocatory member and a bracket, a lever pivotally engaged at one end portion with the reciprocatory member, a rigid link pivotally supported by the bracket and pivotally engaged with the lever midway the length thereof, a handle member pivotally engaged with the bracket, the pivotal connection between the handle member and the bracket and the rigid link and the bracket being common, an arm carried by the pivoted end portion of the handle member and disposed in a direction away from the lever, and a rigid link pivotally engaged with a free end portion of the arm of the operating handle and with the outer end portion of the lever.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

FRANK STEVENS.
FRED C. SPICKER.

Witnesses:

E. A. J. JESSE,
W. J. NIX.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."