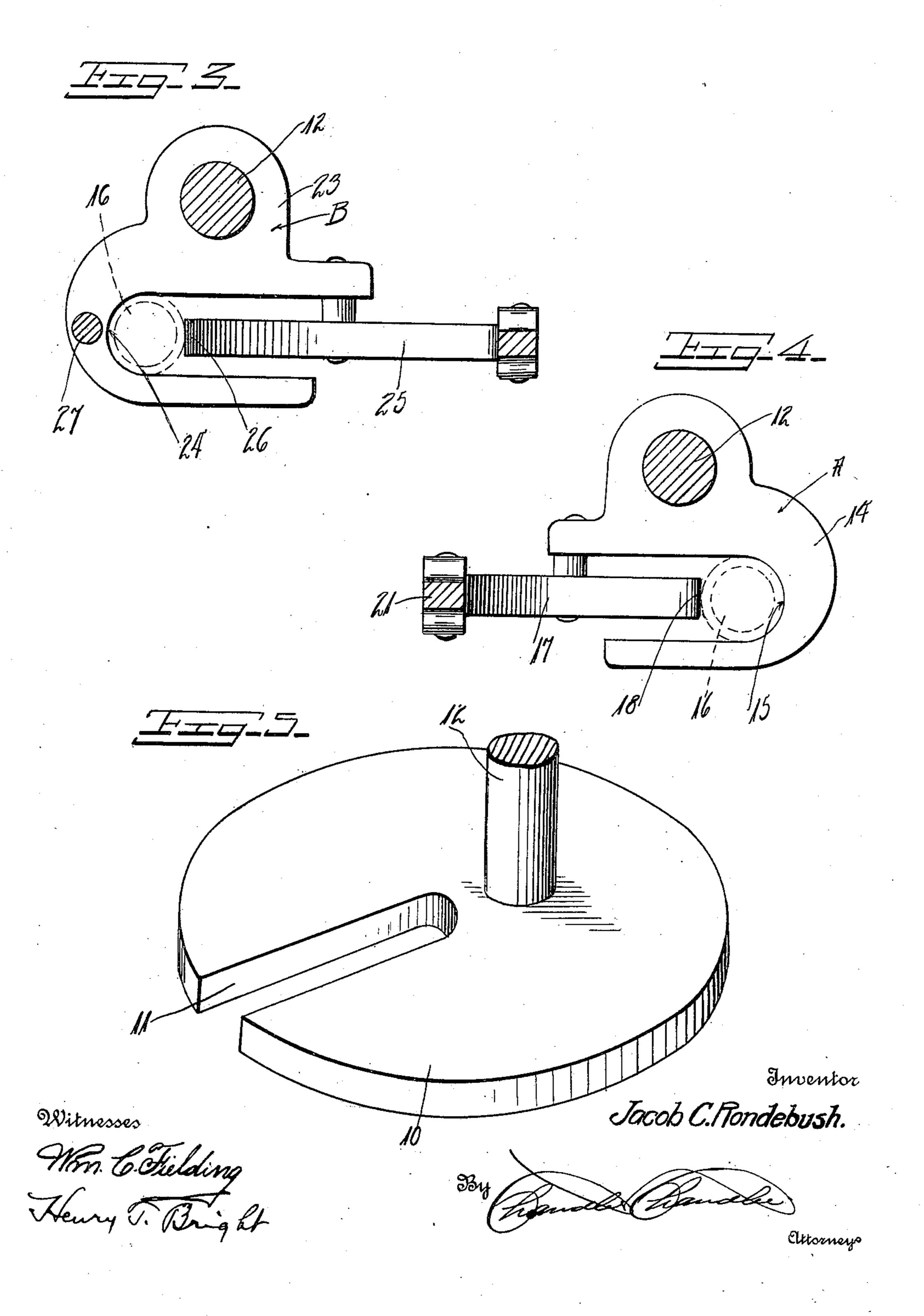
J. C. RONDEBUSH.
WELL PIPE LIFTER.

APPLICATION FILED AUG. 2, 1910. 990,391. Patented Apr. 25, 1911. 2 SHEETS-SHEET 1. Inventor Witnesses. Jacob C. Rondebush.

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UNITED STATES PATENT OFFICE.

JACOB C. RONDEBUSH, OF OSHKOSH, NEBRASKA.

WELL-PIPE LIFTER.

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Specification of Letters Patent. Patented Apr. 25, 1911.

Application filed August 2, 1910. Serial No. 575,124.

To all whom it may concern:

Be it known that I, JACOB C. RONDEBUSH, a citizen of the United States, residing at Oshkosh, State of Nebraska, have invented 5 certain new and useful Improvements in Well-Pipe Lifters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-10 pertains to make and use the same.

This invention relates to well-pipe lifters. The object of the invention resides in the production of a simple and efficient portable mechanism for lifting pipes or rods into and 15 out of wells.

With this object in view the invention consists in the details of construction and in the arrangement and combination of parts as will be hereinafter more fully described 20 and particularly pointed out in the appended claims.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of refer-25 ence denote corresponding parts in the several views; and in which,

Figure 1 is a side elevation of a pipe lifting mechanism constructed in accordance with the invention; Fig. 2, a front elevation 30 of same; Fig. 3, a section on the line 3—3 of Fig. 1; Fig. 4, a section on the line 4—4 of Fig. 1; and, Fig. 5, a detail perspective view of the supporting base of the mechanism.

Referring to the drawings, 10 indicates the base of the apparatus which is of circular formation and is provided with a radially disposed recess 11. Secured to and rising from the base 10 adjacent the inner 40 end of the recess 11 is a vertical bar 12, the upper end of which is forked, and between the arms of said forked end there is pivoted a lever 13. The holding clutch of the apparatus is indicated generally by A and com-45 prises a head 14 which is fixedly secured to the bar 12 in proximity to the base 10. This head 14 is provided with a socket 15 in vertical alinement with the recess 11 of the base and which is adapted to receive a 50 pipe 16 to be lifted. A pipe engaging arm 17 is pivotally connected to the head 14 and has its toothed engaging end 18 disposed within the socket 15 and adapted to engage the pipe 16 as same is elevated to hold it 55 against movement back into the well. The

toothed end 18 of the arm 17 is so shaped and arranged however, that the pipe 16 is always free to move in an upward direction with respect to the interior of the well. Slidably mounted upon the bar 12 above the 60 head 14 is a sleeve 19 which has projecting laterally therefrom a horizontal arm 20 which terminates in a vertical portion 21, and the free end of said vertical portion is pivotally connected with the end of the arm 65 17 which is disposed without the socket 15. A spring 22 encircles the bar 12 and has its upper end bearing against the sleeve 19 and its lower end against the head 14; said spring constantly tending to elevate the 70 sleeve 19 and thereby raise the end of the arm 17 disposed without the socket 15 in an upward direction, whereby the engaging end 18 of said arm is forced against the pipe 16. From this construction it will be appar- 75 ent that the pipe 16 can be elevated through the socket 15 without any hindrance to its movements being offered by the arm 17; however, it will also be apparent that any lowering of the pipe 16 will cause the en- 80 gaging end of the arm 17 to bite and hold the pipe against movement in a downward direction.

The lifting clutch of the device is indicated generally by B and comprises a head 85 23 slidably mounted upon the bar 12 and provided with a pipe receiving socket 24 disposed in opposition to the socket 15 of the holding clutch, but in substantially the same vertical plane therewith. Pivotally con- 90 nected to the head 23 is a pipe engaging arm 25 provided with a tooth engaging end 26 disposed within the socket 24. Rising from the upper end of the head 23 in parallel spaced relation to the bar 12 is a standard 95 27. A link 28 has one end pivotally connected to the lever 13 and its other end pivotally connected to the end of the arm 25 which is disposed without the socket 24. Slidably mounted upon the bar 12 and the 100 upright 27 and having one end fixedly secured to the link 28 is an arm 29 and a spring 30 encircles the bar 12 and has its upper end in engagement with the arm 29 and its lower end with the head 23. As will 105 be apparent, the spring 30 constantly tends to move the head 23 and the arm 29 away from each other, such movement causing the arm 25 to be swung on its pivot into position to engage and grip the pipe 16 when the 110

clutch B is elevated through the medium of the lever 13.

It will be understood that in practice various changes in the form, proportion, size, and minor details in the construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What is claimed is:

1. A pipe lifting apparatus comprising a base having a vertical bar rising therefrom, a holding clutch mounted on said bar adjacent the base, and a lifting clutch disposed above the holding clutch; said lifting clutch 15 comprising a head slidably mounted upon the bar and having a vertical pipe receiving socket therein, a pipe engaging arm pivoted to the head and having its engaging end disposed within the socket, a lever pivoted to 20 the upper end of said bar, and connections between the lever and the engaging arm whereby the movement of said lever in one direction will simultaneously lift the head and force the engaging end of the arm 25 against a pipe disposed within the socket.

2. A pipe lifting apparatus comprising a base having a vertical bar rising therefrom, a holding clutch mounted on said bar adjacent the base, and a lifting clutch disposed above the holding clutch; said lifting clutch comprising a head slidably mounted upon the bar and having a vertical pipe receiving socket therein, a standard rising from said head in parallel spaced relation to the bar, a pipe engaging arm pivoted to the head having its engaging end disposed within the

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socket, a lever pivoted to the upper end of said bar, a link connecting said lever and the end of the engaging arm disposed without the socket, an arm slidably engaging the upright rising from the head and the bar and having one end fixedly secured to said link, and a spring constantly tending to force said head away from the last named arm.

3. A pipe lifting apparatus comprising a base having a vertical bar rising therefrom, a holding clutch mounted on said bar adjacent the base; said holding clutch comprising a head fixed to the bar and having a 50 vertical pipe receiving socket therein, a pipe engaging arm pivoted to the head and having its engaging end disposed within the socket, a sleeve slidably mounted upon said bar above the head, a connection between 55 said sleeve and the end of the engaging arm without the socket for moving said arm into engagement with a pipe disposed within the socket when said sleeve is moved toward the upper end of the bar, and spring actuated 60 means constantly tending to move said sleeve toward the upper end of the bar, a lifting. clutch slidably mounted upon said bar, above the holding clutch, and means for sliding said lifting clutch upon the bar.

In testimony whereof, I affix my signature, in presence of two witnesses.

JACOB C. RONDEBUSH.

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Witnesses:

Moses Wetherby,
Willord P. Vance.

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