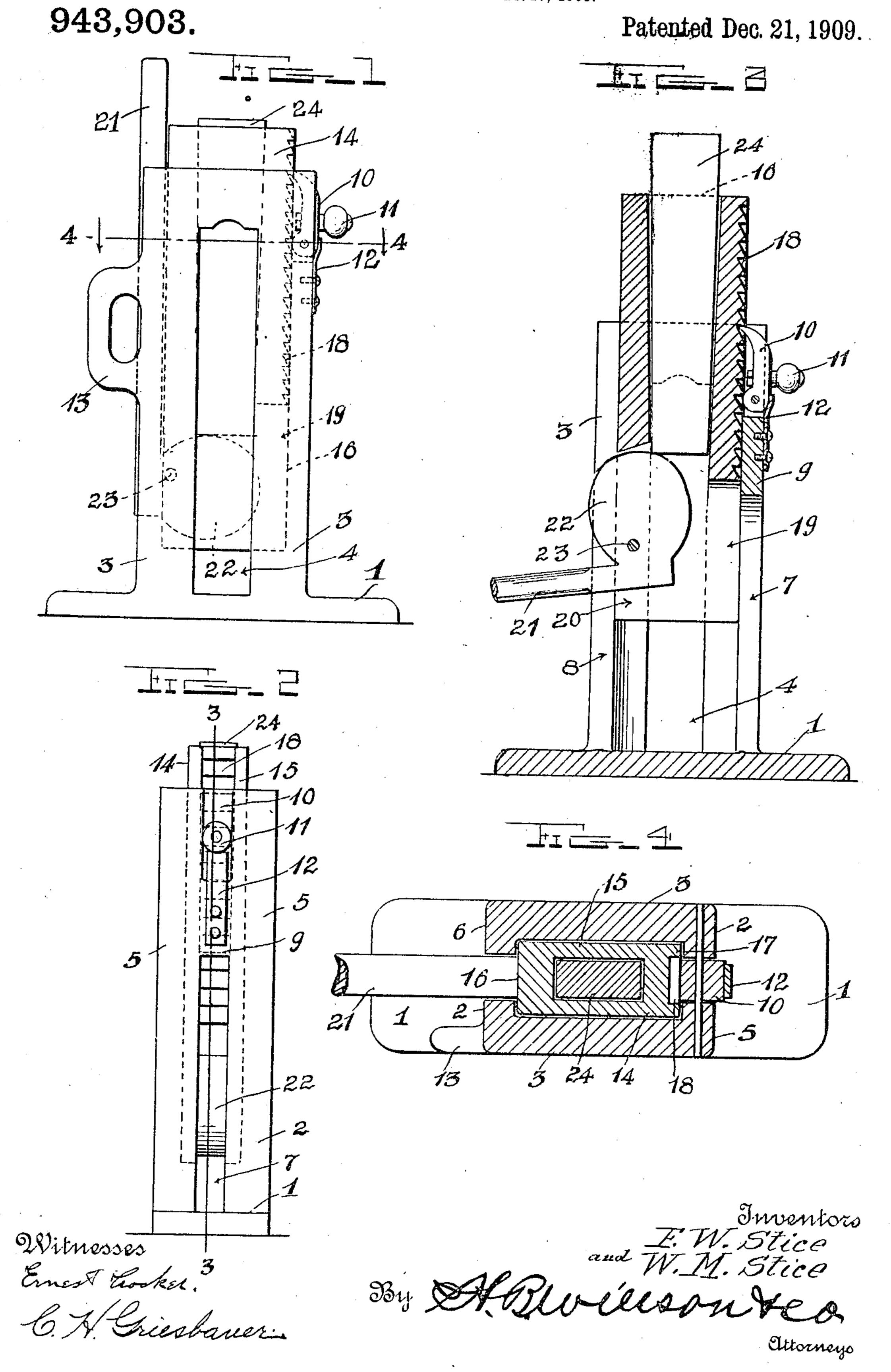
F. W. & W. M. STICE.

LIFTING JACK.

APPLICATION FILED DEC. 17, 1908.



UNITED STATES PATENT OFFICE.

FRED W. STICE AND WILLIAM M. STICE, OF ARDON, IOWA.

LIFTING-JACK.

943,903.

Patented Dec. 21, 1909. Specification of Letters Patent.

Application filed December 17, 1908. Serial No. 468,031.

To all whom it may concern:

WILLIAM M. STICE, citizens of the United States, residing at Ardon, in the county of 5 Muscatine and State of Iowa, have invented certain new and useful Improvements in Lifting-Jacks; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable 10 others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in lifting jacks and comprises the construction of a compound lifting jack particularly de-15 signed for use in connection with vehicles.

One of the objects of the invention is the production of a lifting jack which may be readily secured under a vehicle axle and operated thereunder without damaging the 20 vehicle.

Another object of the invention is the production of a lifting jack comprising a guide frame and an adjustable support movable on the guide frame and provided with

25 a lever operated lifting bar. With the foregoing and other objects in view, the invention consists of certain novel features on construction, combination and arrangement of parts as will be more fully 30 described and particularly pointed out in

the appended claims. In the accompanying drawings, Figure 1 is a side elevation of our improved lifting jack; Fig. 2 is an end elevation; Fig. 3 is a 35 vertical central longitudinal sectional view taken on line 3-3 of Fig. 2, with the operating lever shown in dotted lines in its raised position, and, Fig. 4 is a horizontal sectional view taken on line 4—4 of Fig. 1.

In the drawings the preferred embodiment of our invention is illustrated in which the numeral 1 designates the base on which is secured an upstanding guide frame 2. The guide frame 2 comprises a pair of side 45 pieces 3 which are formed with longitudinally disposed slots 4 and end pieces 5 and 6, which are secured to the ends of the side pieces 3 and spaced apart to form openings 7 and 8. A block 9 is rigidly mounted on 50 the end pieces 5 near their upper ends and in the opening 7 and a pawl 10, which is provided with a handle 11, is pivotally secured to the end pieces 5 above the upper end of the block 9.

A spring 12 is mounted on the block 9 and is adapted to hold the pawl 10 in alinement!

be it known that we, Fred W. Stice and | with the side pieces 5. A handle 13 is mounted on one of the end pieces 6 in order that the jack may be readily grasped and moved from place to place. An adjustable 60 support comprising an integral tubular structure having side pieces 14 and 15 is movable within the guide frame 2, said side pieces being spaced apart by the integral end pieces 16 and 17, the end pieces 16 be- 65 ing formed with a series of ratchet teeth 18. The end pieces 16 and 17 are arranged flush with the upper ends of the side pieces 14 and 15 and have their lower ends cut off above the lower ends of said side pieces so 70 as to form an opening 19.

The lower ends of the side pieces 14 and 15 are formed with transverse openings 20 and a lever 21, which is provided with a cam 22, is pivotally secured, by means of a bolt 75 23 arranged in the openings 20, to said side pieces. A lifting block 24 is confined within the adjustable support and is adapted to be raised thereon when the lever 21 is depressed.

In its normal position the adjustable support rests upon the base 1 and the pawl 10 is held in positive engagement with the ratchet teeth 18 of the side piece 17. When it is desired to utilize the jack for lifting 85 purposes, the adjustable support and the lifting bar 24 are moved under the axle of the vehicle and said support is moved into engagement with the axle, the pawl 10 preventing the support from moving down- 90 wardly on the guide frame 2. When it is desired to lift an axle, the lever 21 is depressed thereby forcing the lifting bar 24 upwardly from the adjustable support where it will be held by the pressure of said 95 bar upon the cam 22. When not in use, the lever 21 is partly confined within the opening 8 by the side pieces 6 and said lever may be provided with suitable stop means for controlling its movement by steps should 100 the same be desired.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood with- 105 out requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advan- 110 tages of the invention, as defined in the appended claims.

We claim as our invention:—

1. In a device of the class described, a guide frame, an adjustable support movable within the guide frame, a self locking 5 lever pivoted to the adjustable support, and a lifting bar operated by the lever movable within said adjustable support.

2. In a device of the class described, a base, an upstanding guide frame arranged on the base, an adjustable support movable within the guide frame, a self locking lever pivoted to the adjustable support, and a lifting bar operated by the lever arranged

within said support.

3. In a device of the class described, a base, a guide frame arranged on the base, an adjustable support provided with ratchet teeth movable within the guide frame, a pawl pivoted to the guide frame for con-20 trolling the movement of the adjustable support a lifting bar slidably mounted in the support and lifting self locking means arranged on the adjustable support to support said bars.

4. In a device of the class described, a 25 base, a guide frame arranged on the base, an adjustable support movable within the guide frame, said adjustable support being formed with ratchet teeth, a pawl pivoted to the guide frame arranged to control the 30 movement of the adjustable support, a lever pivoted to the adjustable support provided with a cam arranged thereon, and a lifting block movably arranged within the adjustable support and adapted to be engaged by 35 the cam.

In testimony whereof we have hereunto set our hands in presence of two subscribing

witnesses.

FRED W. STICE. WILLIAM M. STICE.

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Witnesses to signature of Fred W. Stice: A. J. Wolf,

JOHN W. CROWE.

Witnesses to signature of William M. Stice:

> THOS. J. MANNING, F. W. Eutsler.