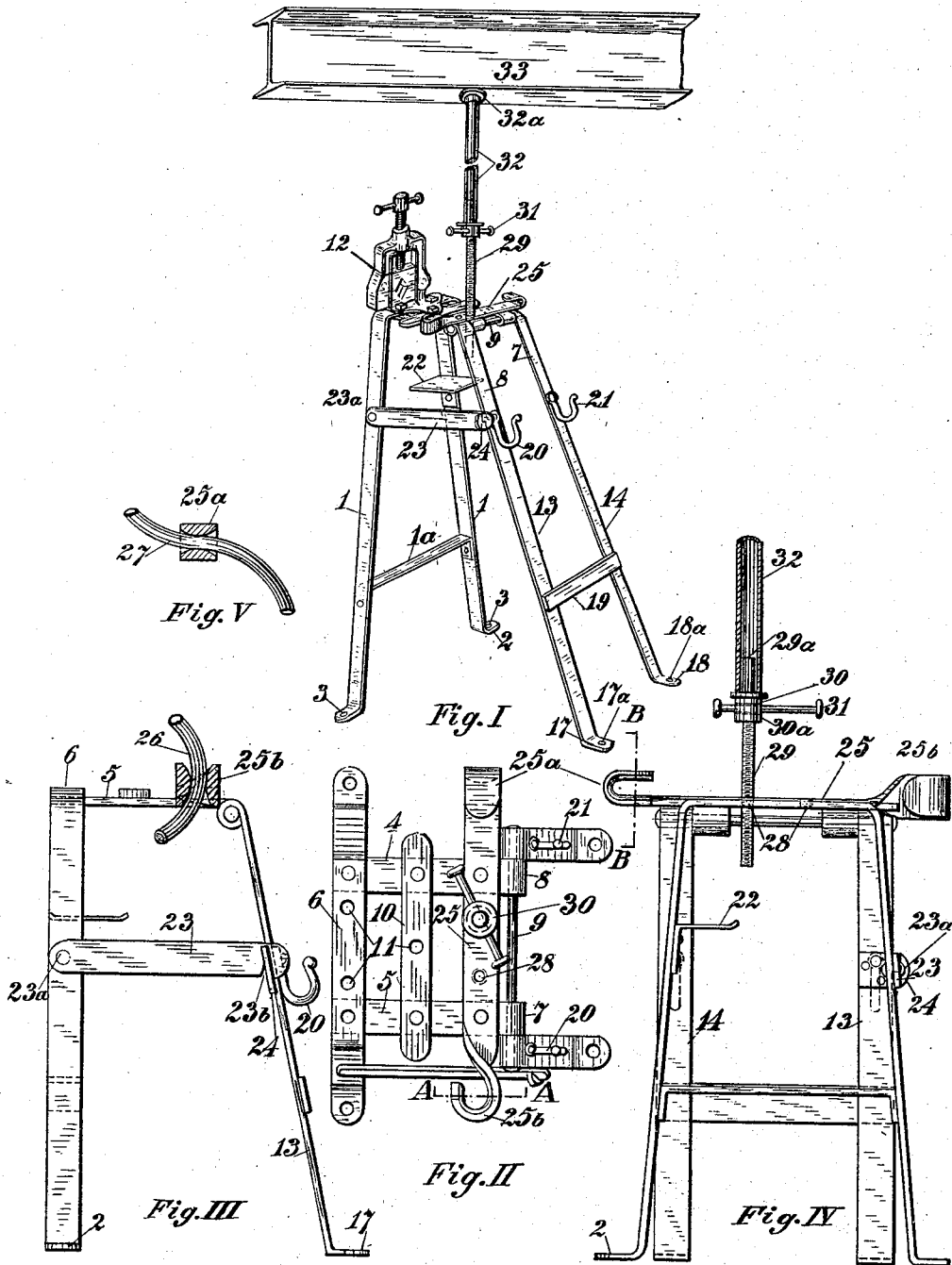


H. ROSENBAUM.
PORTABLE WORK BENCH.
APPLICATION FILED JULY 20, 1916.

1,216,610.

Patented Feb. 20, 1917.

2 SHEETS—SHEET 1.



Witness
Frank J. Hardecker.

Harry Rosenbaum Inventor
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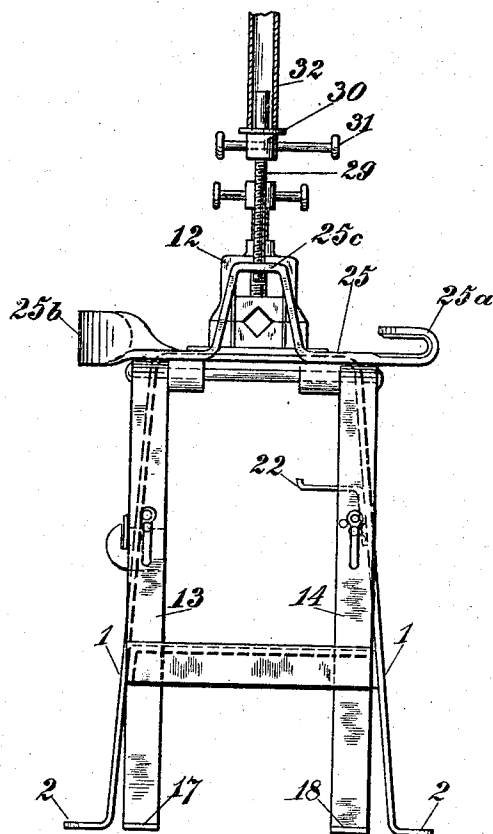
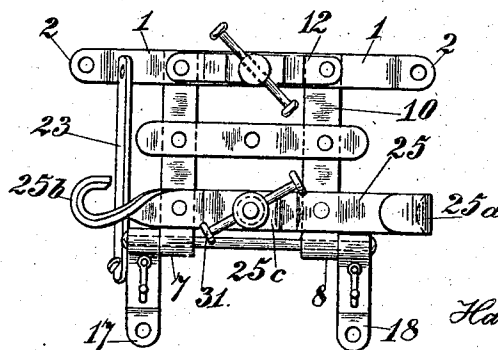


Fig. VII



WITNESS

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HARRY ROSENBAUM, OF NEW YORK, N. Y.

PORTABLE WORK-BENCH.

1,216,610.

Specification of Letters Patent.

Patented Feb. 20, 1917.

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To all whom it may concern:

Be it known that I, HARRY ROSENBAUM, a citizen of the United States, and residing at New York city, in the county and State of New York, have invented certain new and useful Improvements in Portable Work-Benches, of which the following is a specification.

This invention relates to portable work benches for plumbers, machinists, steam fitters and other mechanics employed in the construction of new buildings and on repair work outside of their regular work shop; but particularly this invention relates to improvements in work benches of the type for which Letters Patent No. 869,461 of October 29, 1907 was granted to me, and it is the object of the present invention to provide additional facilities to the mechanic using said bench and to insure absolute stability of the work bench for the heaviest work, especially in buildings with concrete and stone floors, where for these or other reasons it is not possible to fasten the work bench to the floor of the building. The invention consists further in certain novel details of construction hereinafter described and particularly set forth in the appended claims.

Reference is to be had to the accompanying drawings in which—

Fig. I is a perspective view of my portable work bench as erected for use, showing the invention.

Fig. II is a plan view of my portable work bench from which the pipe vise 12 is removed.

Fig. III is a side elevation of said bench showing the pipe bender in section on the line A—A of Fig. II. The brace 29 is removed from this figure.

Fig. IV is a front elevation of the work bench.

Fig. V is a detail section of the pipe bender taken on line V—V of Fig. IV.

Fig. VI is an elevation of my work bench showing an improved way of attaching brace 29.

Fig. VII is a plan view of Fig. VI.

Similar letters of reference indicate corresponding parts throughout the various figures.

Referring to the drawings my work bench consists of a pair of front legs 1 held together by brace 1^a and resting on the floor by feet 2 in which holes 3 are provided to

receive a bolt for fastening the bench to the floor of the building.

The top of the work bench is formed by bars 4 and 5 each of which is rigidly fastened to cross bar 6 of legs 1, the rear ends of the bars 4 and 5 are bent to form hinge portions 7 and 8 embracing the horizontal hinge rod 9. To the top of bars 4 and 5, parallel to bar 6 is fastened bar 10 acting as a brace between these bars and forming a part of the top of the work bench. The bars 6 and 10 are provided with apertures 11 to receive bolts for the fastening of a pipe-vise 12. The two rear legs 13 and 14 are arranged to swing on rod 9 outside of hinges 7 and 8 of bars 4 and 5; these legs are longer than the legs 1 and when in operative position they are slanted in regard to these legs 1; they are provided like bars 1 with feet 17 and 18 and bolt holes 17^a and 18^a. The rear legs 13 and 14 are braced together by a bar 19 and each leg carries a tool rest 20 and 21. To one of the legs 1^a a plate or bracket 22 is secured to accommodate an oil-can or similar utensil. With slight alterations the work bench thus far described comprises the invention previously patented under No. 869461. I have found it of advantage to place a brace or bar 23 between one of the front legs 1 and rear leg 13; one end of said bar is rotatably mounted on a pin, 23^a on leg 1 while the other end is provided with a vertical slot to engage, latch-like, a similar slot provided in bar 24 which is fastened to leg 13. This bar prevents spreading between the front and rear legs under pressure on the top of the work bench and adds to its rigidity. Parallel to bar 10 of the table top I have placed an additional flat bar 25 which is also fastened to the bars 4 and 5, both ends of this bar are bent into the form of a U-shaped hook. The novel features of this pipe bender will be the subject matter of a separate application for Letters Patent. Bar 25 is provided with two tapped holes 28 and 28^a either of which may receive the screw 29 which carries near its upper end head 30 with lever 31 extending through the horizontal aperture 30^a of head 30 forming a brace, the upper end 29^a protrudes above head 30 and serves as a pivot to be encircled by a piece of pipe 32 which is of convenient length and at its upper end provided with a flange 32^a to form an extension of the brace to

the ceiling of the room in which my portable work bench is used. The I beam 33 of Fig. I represents a part of this ceiling and this work bench may conveniently be braced against
 5 this beam by turning the lever 31, thereby raising screw 29, head 30 and pipe 32.

Although the operation and use of my new devices will be clear from the foregoing description, the advantage of the brace 29
 10 should be explained. In new buildings of the fireproof type the use of any work bench is impaired by the difficulty of fastening the legs of the bench to the floor, which generally consists of concrete or stone. While
 15 my work bench is stable enough to stand the strain of ordinary work without any fastening to the floor, the additional functions required of the same by my new pipe bending device make it desirable to add to its rigid-
 20 ity for which purpose I designed the improved vertical brace to the ceiling of the work room or its beams, which insures absolute stability under the severest conditions of work done.

25 The brace 29 can be easily removed from my work bench when not required; it may be inserted in either of the holes 28 not to interfere with any pipe bending operation carried on in pipe bender 25^a or 25^b, or with
 30 a pipe shifted through the jaws of the pipe vise 12. It will be noticed, however, that the brace 29 when inserted in either one of the threaded holes 28 exerts a one-sided pressure on the work bench pressing more
 35 on the legs 17 than 18 or vice versa. To avoid such uneven distribution of the pressure of brace 29 upon the four feet 2—2 and 17—18 of the work bench I have modified the pipe bender and support for this
 40 brace into the form shown in Figs. VI and VII, in which the bar 25 is provided with an

additional upward loop 25^c of the shape of an inverted U and the threaded hole for accommodation of brace 29 is placed in the horizontal leg of this loop in alinement with
 45 the opening of the jaws of vise 12 and the center line of a pipe inserted into these jaws. Furthermore, the threaded hole in loop 25^c is so placed as to be exactly above
 50 the center of gravity of the rectangle formed by the four feet 2—2 and 17—18 of the work bench. By these means I am enabled to distribute the pressure of brace 29 equally
 55 over the four supports and still shift any desired length of pipe through the jaws of the vise 12 and clamp it therein, without interference with brace 29. The advantage of
 60 the pipe benders 25^a and 25^b lies principally in their convenient arrangement to bend pipe in vertical direction in bender 25^a and in horizontal direction in bender 25^b.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a work-bench, a support, a table-
 65 top, formed with a threaded aperture, a brace comprising a screw, fitting at one end in said aperture to be adjustable up and down in said table-top and an extension on
 70 said screw, to thrust against the ceiling of the work-room.

2. In a portable work bench, comprising a table-top and a vise, a bar formed with a threaded aperture supported a distance
 75 above said table-top to leave a free passage for material clamped in said vise between said table-top and said aperture, a screw in threaded engagement with said aperture and
 80 an extension adjustable on said screw to thrust against the ceiling of the work room.

HARRY ROSENBAUM.

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