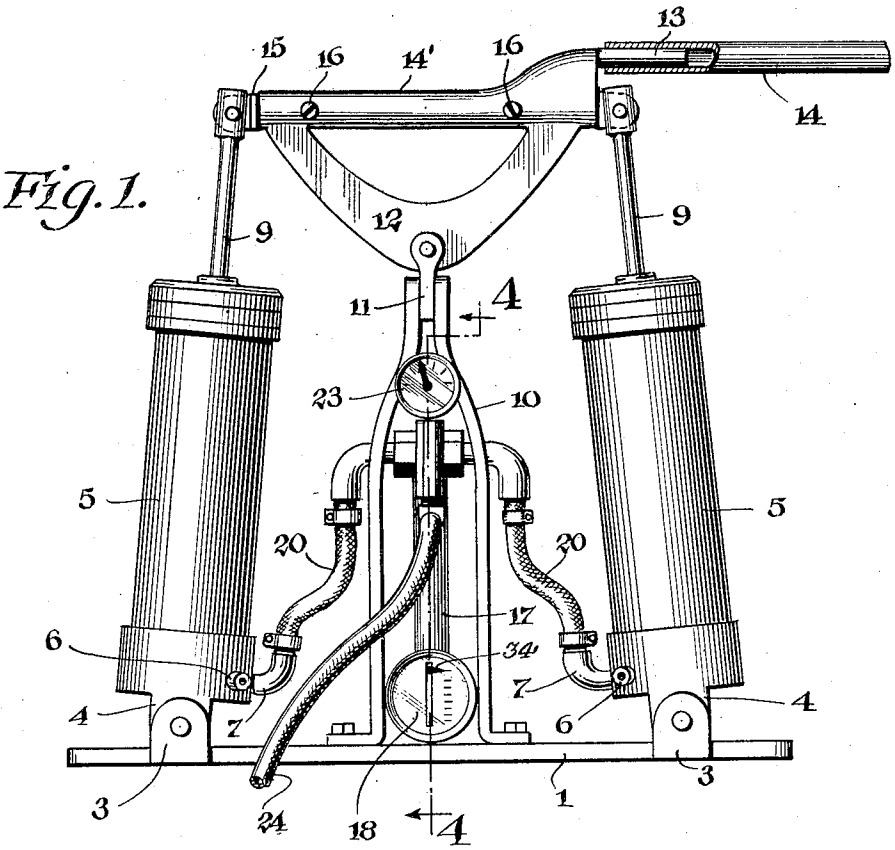
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S. TASKY

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Fig. 1.



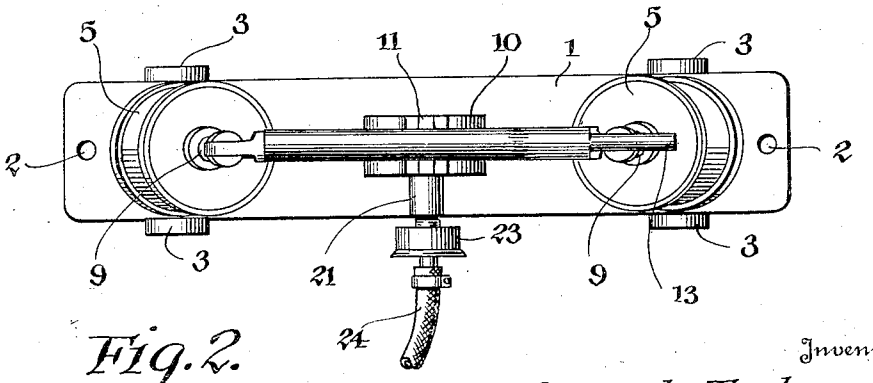


Fig. 2.

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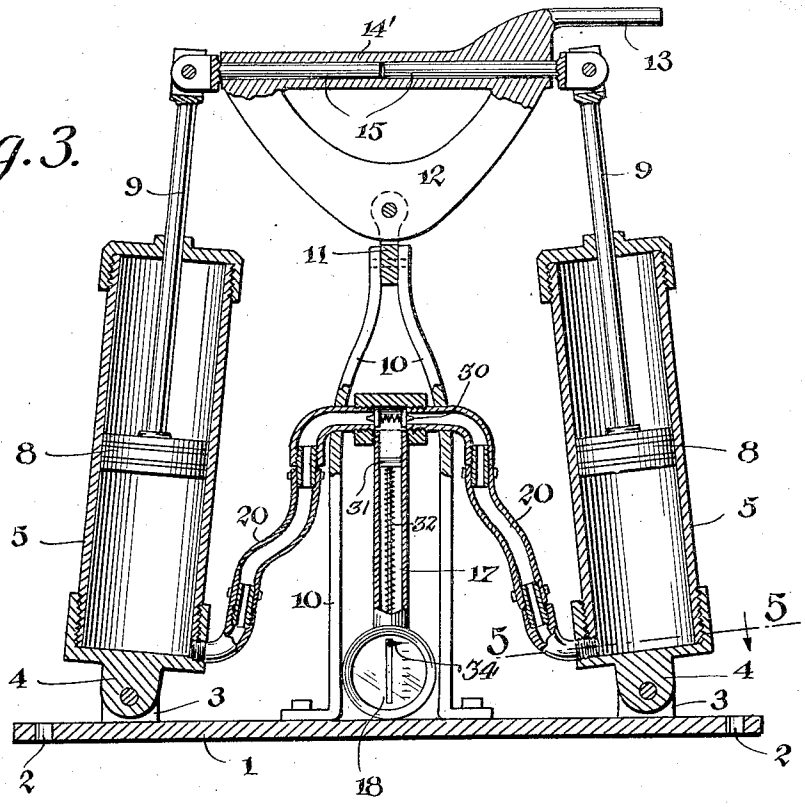
Nov. 4, 1924. 1,513,873

S. TASKY

AIR PUMP

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Fig. 3.



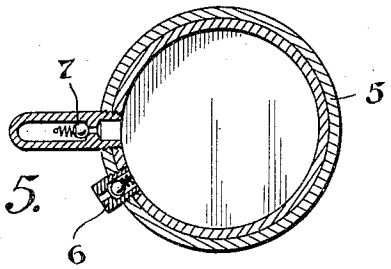


Fig. 5.

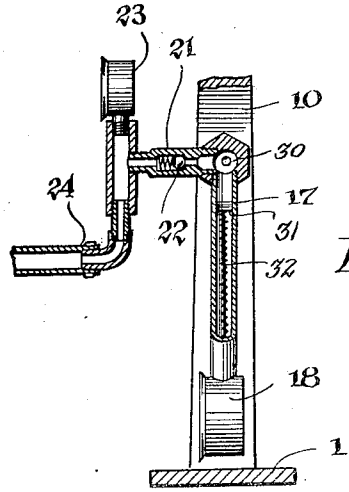


Fig. 4.

Inventor

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By John T. Dobbe

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Patented Nov. 4, 1924. 1,513,873

UNITED STATES PATENT OFFICE.

SAMUEL TASKY, OF DANVILLE, ILLINOIS.

AIR PUMP.

Application filed November 2, 1923. Serial No. 672,337.

To all whom it may concern:

Be it known that SAMUEL TASKY, a citizen of the United States, residing at Danville, in the county of Vermilion and State of Illinois, has invented certain new and useful Improvements in Air Pumps, of which the following is a specification.

This invention relates to air pumps and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a pump especially adapted to be used for inflating pneumatic tires and it includes a pair of pump cylinders mounted upon a base stand for pivotal movement. Each cylinder is provided with a valve controlled air inlet opening and a valve controlled air outlet opening. Pistons are slidably mounted in the cylinders. Piston rods are attached to the pistons. A yoke is pivoted upon the stand. Bars are adjustably mounted in the yoke and pivotally connected with the rods. A handle is adjustably connected with the yoke. The parts are so arranged that when the handle is used for swinging the yoke, the cylinders swing upon their pivots and the pistons are moved simultaneously in opposite directions whereby jets of air are forced from the outlet openings of the cylinders at alternate intervals.

A fitting is mounted upon the stand and pipe sections connect the air outlet openings of the cylinders with the fitting. A pressure gage is carried by the fitting. A second pressure gage is connected with the fitting and a valve is located in the connection. An air delivery pipe section is connected with the second mentioned pressure gage and is adapted to be connected with the nipple of a tire in a usual manner. The readings of the first mentioned pressure gage will show if either of the pump cylinders is failing to deliver the air properly to the fitting. The readings of the second mentioned pressure gage will show the pressure which is established in the tire. By shifting the bars in the yoke the leverage of the handle may be varied whereby the air in the cylinders may be compressed to varying degrees of pressure at the time that it is being forced into the fitting.

In the accompanying drawings—

Figure 1 is a side elevation of the pump.

Figure 2 is a top plan view.

Figure 3 is a vertical sectional view.

Figures 4 and 5 are detailed views of features of the invention.

The pump stand comprises a base plate 1 provided at its end portions with openings 2 through which bolts (not shown) may be passed for securing the stand upon a support. The plate is provided at its edges and in the vicinity of its ends with upstanding lugs 3. The lugs are arranged in pairs and one lug of each pair is located at one side edge of the plate the other mating lugs being at the opposite side edge. Brackets 4 are pivotally mounted between the lugs of each pair of lugs. A cylinder 5 is mounted upon each bracket. Each cylinder is provided with a valve controlled air inlet opening 6 and a valve controlled air outlet opening 7. Pistons 8 are slidably mounted in the cylinders. Piston rods 9 are attached to the pistons and the upper portions of the rods pass through the tops of the cylinders.

A standard 10 is mounted upon the base plate at a point between the ends thereof and carries at its upper end a link 11. A yoke 12 is pivoted at a point between its ends upon the link. The yoke is provided at one end with a stud 13 upon which a detachable handle 14 may be mounted. The yoke carries a sleeve 14′ which receives the inner end portions of bars 15. The bars are secured in adjusted positions in the sleeve by means of set screws 16. At their outer ends the bars are pivoted to the upper ends of the piston rods 9.

A fitting 17 is located between the sides of the standard and carries at its lower end a pressure gage 18. Pipe sections 20 connect the air outlet openings of the cylinders with the upper portion of the fitting. A connection 21 is attached to the upper portion of the fitting and a valve 22 is located in said connection. A second pressure gage 23 is attached to the connection

and the valve 22 is located between the last mentioned pressure gage and the fitting. An air delivery pipe section 24 is connected with the second mentioned pressure gage and the connection 21.

By shifting the bars in the sleeve of the yoke greater or less leverage may be had when the handle is used for swinging the yoke and hence the air which is forced from the cylinders to the fitting may be compressed to a desired degree.

The readings of the lower pressure gage will show if either of the cylinders is failing to deliver a proper quantity of air to the fitting in that the pistons are moved simultaneously in opposite directions and the gage will show the compression stroke of each piston movement.

The air delivery pipe section is connected with the nipple of a tire valve and the readings of the upper gage will show the pressure which is established in the tire. This gage is in view and may be read by one who is standing near the tire as well as by one who may be standing near the pump and hence, the readings at the pump will accurately indicate the degree of air pressure which is established in the relatively remote tire.

Spring pressed valves 30 are located in the fitting 17 to serve to prevent back pressure through the pipe sections 20 or the return of the air through the said pipe sections to the pump cylinders.

A plunger 31 is located in the fitting 17 and is held in an elevated position therein by a spring 32. The stem 33 of the plunger carries at its lower end the indicator finger 34 which is adapted to move vertically over the dial of the gage 18. Therefore, when the air pressure strikes the plunger the same is moved downwardly against the spring and the indicator finger shows the amount of pressure at the gage 18. As the air pressure decreases the said finger and plunger move upwardly. Therefore, the readings of the air pressure may be readily accomplished.

Having thus described my invention what is claimed is—

1. A pump comprising a stand, a pair of cylinders pivoted upon the stand, pistons slidably mounted in the cylinders, means for moving the pistons simultaneously in opposite directions, a fitting mounted upon the stand, air pipes connecting the fitting with the cylinders and having controlling valves, a pressure gage carried by the fitting, a second pressure gage connected with the fitting, a valve controlling the last mentioned gage and a delivery pipe connected with the last mentioned gage.

2. A pump comprising a stand, a pair of cylinders pivoted at one end upon the stand, each cylinder having a valve controlled air inlet, and a valve controlled air outlet, pistons mounted in the cylinders, rods attached to the pistons, a yoke pivoted upon the stand, a handle detachable connected with the yoke, bars adjustably attached to the yoke and pivotally connected with the rods, a fitting mounted upon the stand, pipe sections connecting the outlets of the cylinders with the fitting, a pressure gage connected with the fitting, a second pressure gage connected with the fitting, a valve interposed between the last mentioned gage and the fitting and an air delivery pipe section connected with the last mentioned pressure gage.

In testimony whereof he affixes signature.

SAMUEL TASKY.