March 5, 1929. W. P. JACKSON 1,704,045

CANINE OPERATING TABLE

Filed Jan. 19, 1927 2 Sheets-Sheet 1

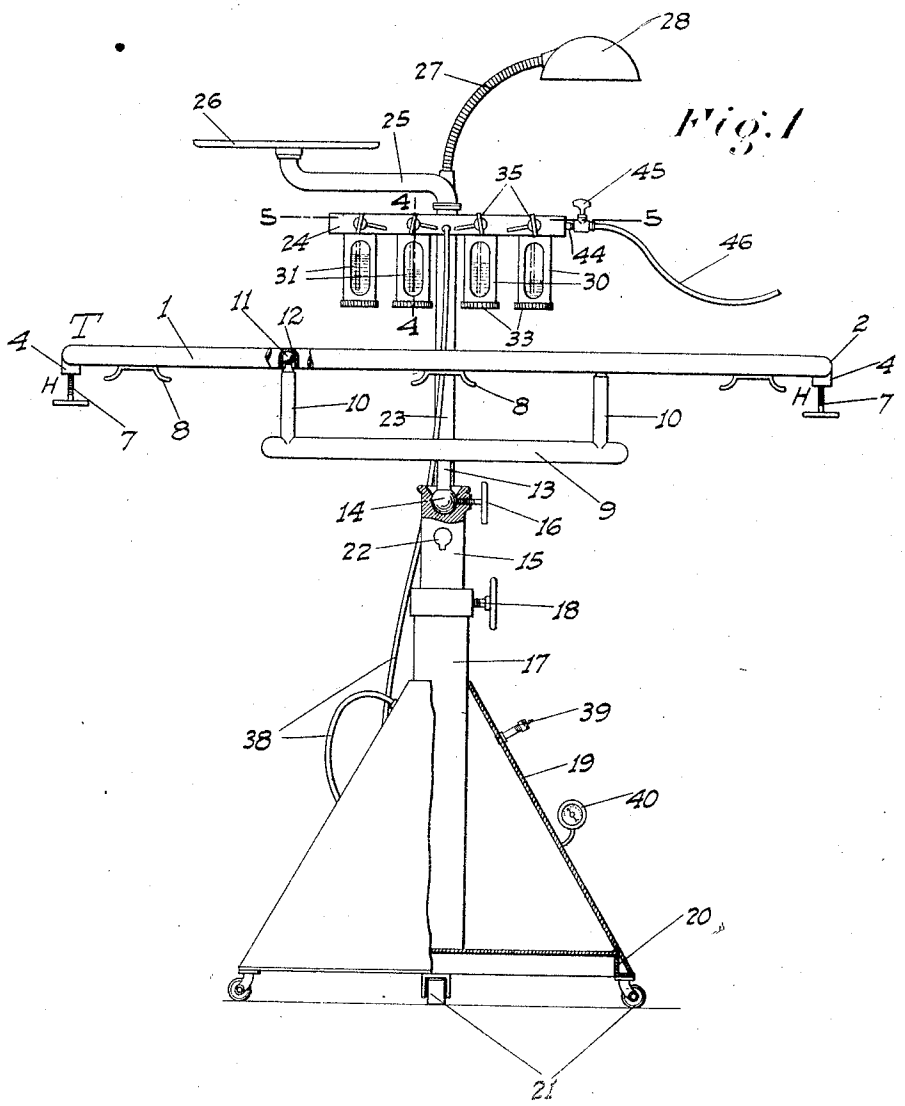


Fig. 1

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Fig. 2

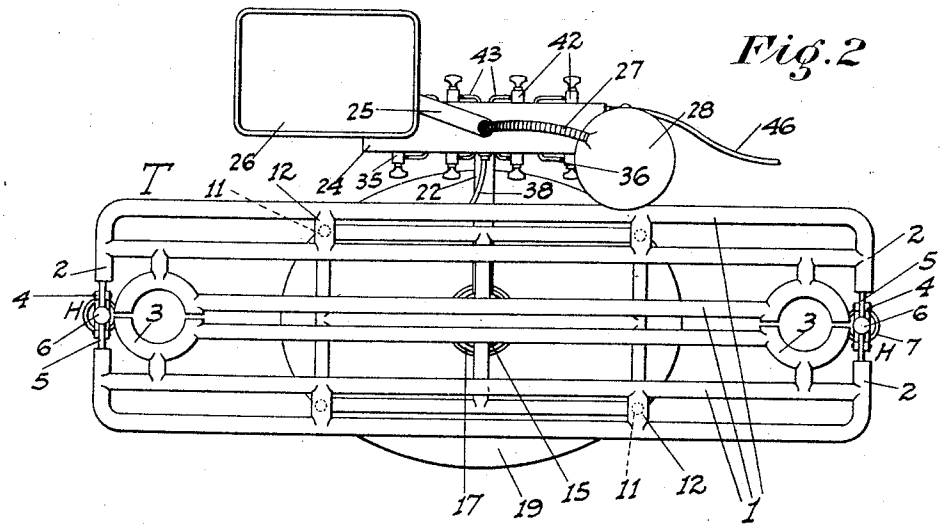


Fig. 3

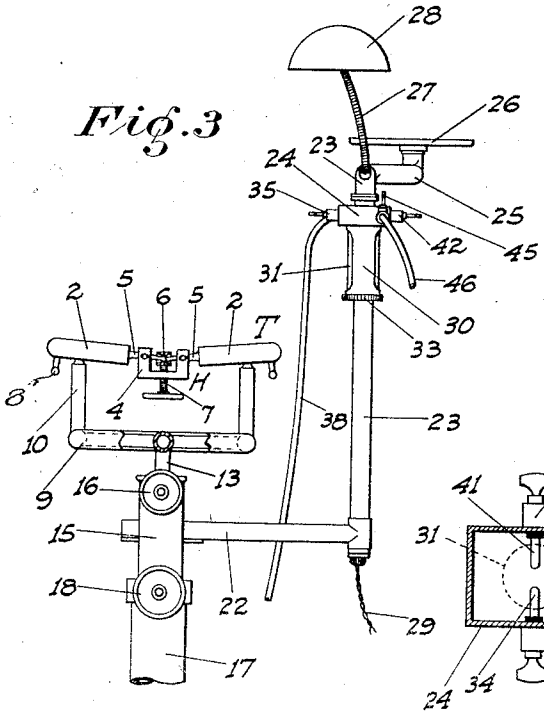


Fig. 4

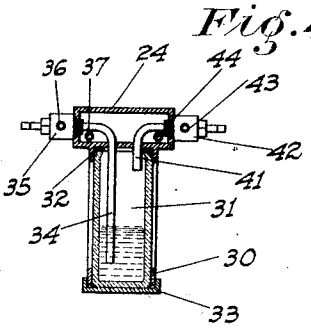
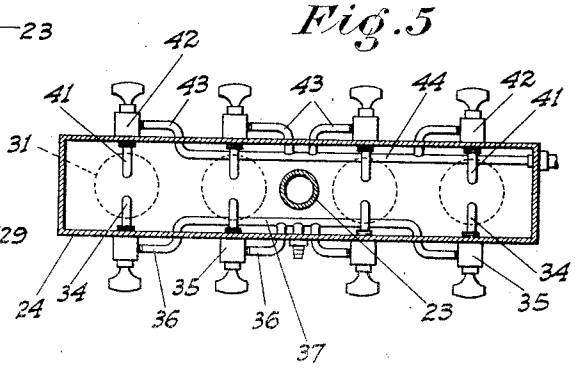


Fig. 5



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Patented Mar. 5, 1929. 1,704,045

UNITED STATES PATENT OFFICE.

WILLIAM P. JACKSON, OF CHICO, CALIFORNIA.

CANINE OPERATING TABLE.

Application filed January 19, 1927. Serial No. 162,022.

This invention relates to an operating table for performing most of the common operations on dogs or other small animals.

The principal object of my invention is to provide a device of this character, the table of which is so arranged that a surgeon can without assistance perform the necessary operation upon the animal disposed on the table with the greatest ease and convenience.

A further object of the invention is to provide in unitary connection with the table an automatic gas mixing and regulating apparatus, by means of which any one of a number of different anæsthetics may be given the animal in a convenient and easy manner.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Fig. 1 is a side elevation of my improved apparatus partly broken away.

Fig. 2 is a top plan view of the same.

Fig. 3 is a fragmentary end view of the device.

Fig. 4 is a cross section on the line 4—4 of Fig. 1, showing one unit of the gas mixing apparatus.

Fig. 5 is a longitudinal plan section of the gas mixing structure taken on the line 5—5 of Fig. 1.

Referring now more particularly to the characters of reference on the drawings, the operating table T consists of a frame structure of suitable width and length and constructed of a number of longitudinally and transversely spaced bars 1 connected by end members 2. The spacing of these bars is such that the legs of an animal on the table may project therebetween. Centrally of the width of the frame and just inside the end members 2 said frame is formed with rings 3 through which the muzzle of the animal may be inserted. The frame is composed of two similar halves which are arranged so as to fold legnthwise along the middle, and are connected by hinge devices H of special construction. This hinging of the frame allows it to be folded into a trough-like form of varying depth to suit the size of the animal and enable it to be more readily maintained in position. The frame may also be folded so as to form an inverted trough of varying convexity, or it may be disposed so as to be horizontal, as the conditions of the case may require.

The frame members are maintained and secured in these various positions by means of the hinges H. These hinges are disposed at the ends of the frame and each one comprises a U-shaped block 4 in the vertical legs of which are loosely pivoted stems 5 which project from the adjacent ends of the members 2. The free ends of these stems slidably extend into a central head 6 which is connected to a vertical hand turned screw 7 which is threaded through the bottom of the block. By means of this arrangement it will be seen that when the hand wheel is turned one way or the other the head is raised or lowered and the stems 5 and the members 2 to which they are connected will turn about the pivotal connections with said block so that the entire frame structure is thus folded one way or the other by this toggle-like action of the hinges.

Cleats 8 are placed at various points on the under side of the frame structure for the purpose of enabling the animal to be securely tied onto the table.

The operating table is supported from a horizontal frame 9 thereunder, said frame having vertical posts 10 at the corners which are surmounted by knobs 11, one of which is plainly shown in Fig. 1. These knobs removably rest in socket members 12 provided in connection with the table T. This arrangement enables the table to be removed from the supporting frame when desired without in the least interfering with the swivel or folding movements of the frame sections.

Projecting downwardly from the under side of the frame 9 is a short stem 13 terminating at its lower end in a ball 14 which is swivelly mounted in the upper end of a post 15. The ball is locked against movement in its socket when desired by means of a hand turned screw 16 mounted in the post. It will be seen that by loosening this screw the frame 9 and the operating table supported thereby may be tilted either longitudinally or transversely to any desired angle when the ball may be clamped in position to maintain the table fixed at such angle. The post 15 is slidably and turnably mounted in a standard 17 which is provided

with a set screw member 18 to engage the post 15 and hold the same at any desired position in the standard.

This standard is built into and surrounded by a sheet metal tank 19 preferably having the form of an elliptical cone which is supported on a frame 20 of similar shape. This frame in turn is preferably supported on casters 21 in order to enable the apparatus to be readily shifted from one place to another.

If it is desired to mount the device in a permanent location these casters would of course be removed, in which case the base frame would rest directly on the floor.

Mounted in and projecting laterally from the post 15 above the standard 17 is an arm 22, which at its outer end is connected to an upstanding arm 23. This vertical arm projects through and is connected to a horizontal rectangular housing 24, whose purpose will be set forth later. On top of the arm 23 a horizontal bracket 25 is swivelly mounted, this bracket at its outer end carrying a horizontal instrument tray 26. Extending out of and projecting upwardly from the bracket adjacent its connection with the arm 23 is a flexible supporting conduit 27 for a hooded electric lamp of ordinary character indicated at 28. The electric wiring from this lamp passes through the conduit and also through the arm 23 to its lower end, at which point it may be connected to an extension cord indicated at 29 by means of the standard form of connection plug.

The gas mixing apparatus which is mounted in connection with the housing 24 comprises a plurality of vertical cylinders 30 which depend in longitudinally spaced relation from the under side of the housing 24. These cylinders are open on the bottom to contain the glass jars 31 in which may be placed different forms of anaesthetics such as chloroform, ether and the like. The tops of the jars are left open and abut against the under face of the housing and are sealed by rubber gaskets 32 between said tops and the housing (see Fig. 4). The jars are maintained in pressing engagement with the gaskets by means of base caps 33 threaded onto the bottom of the cylinders. The front and rear faces of the cylinders are cut away somewhat as shown in Fig. 1, so that the amount of the drugs in the various jars may be seen at all times.

Projecting downwardly into each jar nearly to the bottom thereof from the inside of the housing 24 is a glass tube 34. The upper ends of the various tubes are connected to control valves 35 projecting outwardly from one side of the housing 24, intake leads 36 to said valves being connected in common to a compressed air pipe 37 disposed inside the housing. At any desired point in its length this pipe is connected by a rubber hose 38 to the tank 19 in which a supply of compressed air is maintained. The air is applied under pressure to the tank by means of an ordinary tire valve 39 mounted therein, a pressure gage 40 being provided in connection with the tank to indicate the air pressure therein. Also leading from the inside of the housing 24 into the top of each jar and extending therein only a short distance is a tube 41 connected to a control valve 42 projecting from the outside of the housing on the side thereof opposite the valves 35. Short outlet pipes 43 arranged in connection with the different valves 42 are connected in common to a delivery pipe 44 which leads to one end of the same and is provided with a control valve 45 at such end. Beyond this valve a rubber tube 46 leads any necessary distance, said tube being connected at its outer end to the usual type of cone used in administering the gas to the subject (not shown). By means of this arrangement it will be seen that a mixture of air and the drug from any of the jars may be obtained by the surgeon, as may be desired, the strength and quantity of the mixture being controlled by proper manipulation of the various valves.

The gas mixer being arranged in unitary connection with the table it is very easy and convenient matter to administer the gas to the animal, as will be evident. Also the instrument tray and lamp being likewise mounted in direct connection with the table, and being also vertically adjustable and rotatable therewith, insures that these important members will always be within the proper and convenient reach of the operator. The entire operation may therefore be very quickly and easily carried out with a minimum of time and without the annoyance incident to the use of makeshift arrangements.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth hercin.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

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

1. An operating table including a table structure consisting of two longitudinal and separate elements, hinge means connecting said elements, and means incorporated with and attached only to said hinge means for enabling the elements to be turned to assume positions at different angles relative to a

horizontal plane and to be held in such positions.

2. An operating table including a table structure consisting of two longitudinal and separate elements, hinge means connecting said elements; such hinge means comprising blocks disposed between the elements at the ends thereof, stems projecting from the elements toward each other and pivoted intermediate their ends in the blocks, heads engaging the free ends of the stems, and means mounted on the blocks for moving the heads vertically.

3. An operating structure comprising in combination a base, a table supported therefrom, a gas mixing apparatus supported from the base in unitary association with the table, and a gas tank connected with said apparatus provided in the base.

4. An operating structure including a table consisting of two transversely spaced and separate table elements, and hinge means connecting said elements, the elements having a substantially circular opening therethrough adjacent one end to receive the muzzle of an animal therethrough and disposed symmetrically relative to the adjacent hinged edges of the elements.

5. An operating structure including a table consisting of two transversely spaced and separate elements, hinge means connecting said elements to enable them to be folded with respect to each other one way or the other, a frame under said elements, means for detachably supporting the table elements from the frame without interfering with the folding movement of said elements, and means incorporated directly with the hinges and attached only thereto for turning the table elements on the hinges.

6. An operating table comprising a supporting frame, longitudinally and transversely spaced rigid posts projecting upwardly from the frame, transversely separated table elements swivelly supported upon said posts, and connecting and adjusting means mounted solely on and extending between the adjacent ends of the table elements arranged to enable the same to be folded with respect to each other.

In testimony whereof I affix my signature.

WILLIAM P. JACKSON.