

May 3, 1960

J. S. PARSONS

2,935,286

INFUSION STANDARD

Filed Jan. 27, 1956

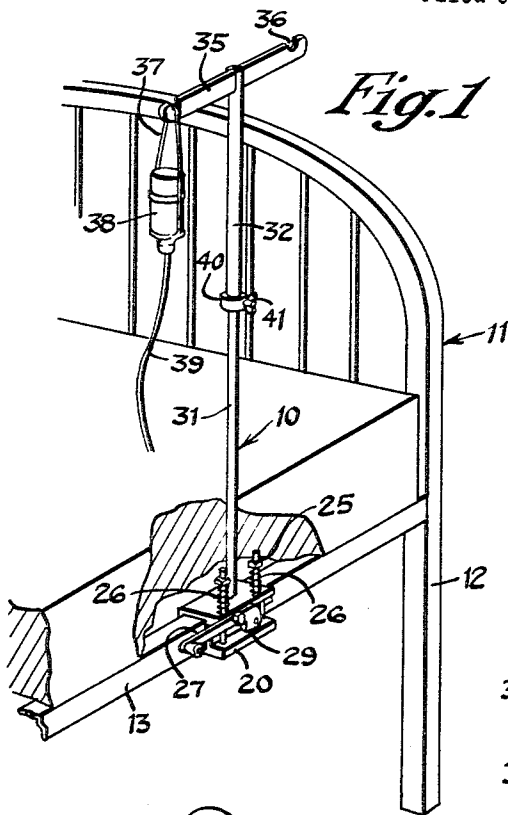


Fig. 1

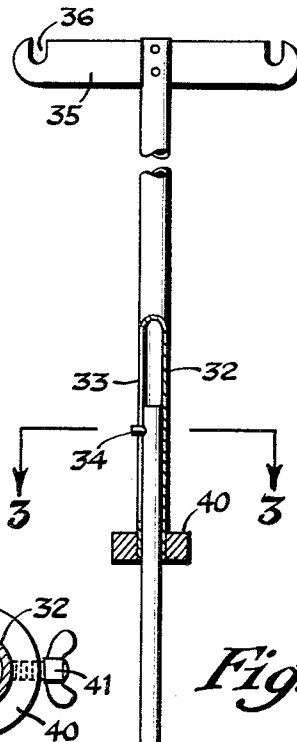


Fig. 2

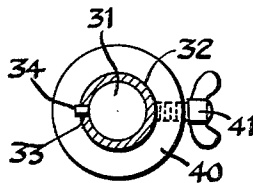


Fig. 3

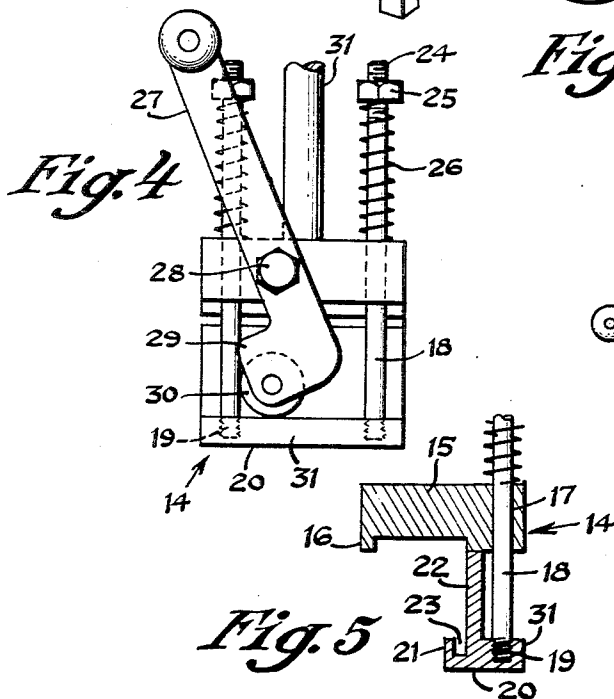


Fig. 4

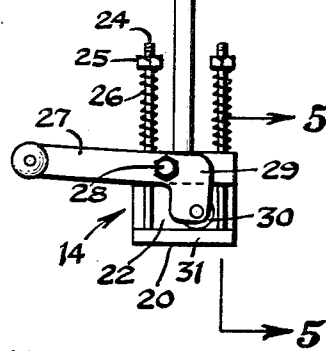


Fig. 5

INVENTOR.
JIM S. PARSONS
BY
Patrick D. Beavers
ATTORNEY

1

2,935,286

INFUSION STANDARD

Jim Skelt Parsons, Benham, Ky.

Application January 27, 1956, Serial No. 561,906

1 Claim. (Cl. 248—227)

This invention relates to improvements in apparatus constructed for the efficient infusion of blood and other substances into the human body, and an important object is to provide a standard for this apparatus which can be readily clamped to a rail of a bed structure.

Another object of the invention is to provide an infusion structure especially adapted to be clamped to a bed structure which involves various safety factors, yet permits the structure to be readily adjusted or disconnected from the bed entirely in a prompt and safe manner.

These and other objects and advantages of the invention will become apparent to the reader of the following description.

In the drawing:

Figure 1 is a perspective view of the standard, shown attached to a bed.

Figure 2 is an enlarged side elevational view of the standard, with a portion in section.

Figure 3 is an enlarged cross section taken on line 3—3 of Figure 2.

Figure 4 is an enlarged fragmentary side elevational view of the clamp means.

Figure 5 is a section taken on line 5—5 of Figure 2.

Referring to the drawings, wherein like numerals designate like parts, it can be seen that the present invention is generally referred to by numeral 10 and Figure 1 shows the same mounted on a bed generally referred to by numeral 11, this bed having (as shown) a foot structure 12 and side rails 13 (only one of which is shown) of angle formation.

The present invention generally referred to by numeral 10 consists of a lower clamp assembly generally referred to by numeral 14 and this consists of an upper block 15, one edge portion of which is provided with a depending lip 16, while the other edge portion is formed with a pair of vertical openings 17 therein for receiving vertical pins 18, the lower ends of which are threaded as at 19 and disposed into threaded openings in a lower clamp section 20, which also has a lip 21, this lip 21 being up-standing and slightly spaced from a vertical flange 22 on the lower section 20 to form a channel 23 for the reception of the lower edge portion of the bed rail 13. The lip 16 abuts the inner edge side portion of the top flange of the rail 13, as is suggested in Figure 1.

The upper end portions of the pins 18 are threaded as at 24 to accommodate nuts 25 and interposed between these nuts 25 and the top side of the clamp block 15 are compression springs 26, which serve to maintain the block 15 in clamped position against the rail 13 in cooperation with the lower section 20 of the clamp. A lever which functions as a cam consists of a handle 27 pivoted as at 28 to the outside of the block 15. The lower end of the handle 27 has a lateral foot 29 carrying a roller 30, which rides a ledge 31 on the lower clamp section 20.

Rigidly connected to and rising vertically from the clamp block 15 is a post 31 on the upper end of which

2

a sleeve 32 is slidable, the sleeve 32 having a longitudinal slot 33 therein, while the upper end of the post 31 has a pintle 34 projecting into the slot 33.

The upper end of the sleeve 32 is provided with a cross bar 35 projecting equidistantly in opposite directions from the sleeve, and the ends of this bar 35 are formed with notches 36 for receiving the usual strap or hanger cord 37 of an infusion bottle 38 from which depends the usual infusion tube 39.

The lower end of the sleeve 32 has a fixed collar 40 and this has a threaded opening therethrough to accommodate a winged screw 41 and when this is screwed inwardly, it will bite against the post 31 to prevent any self adjustment of the sleeve 32 on the post, thus maintaining the infusion bottle 38 at the desired height over the bed and patient.

It can be seen, that when the standard has been properly attached to the rail 33 and the sleeve 32 brought to the desired height, the clamp structure 14 can be loosened by actuating the handle 27 so that it can be easily slid to the desired position on the rail 13.

When it is desired to remove the entire ensemble from the bed rail, the lever 27 can be thrown upwardly to its limit position as shown in Figure 4. This raises the block 15 substantially above the bed rail 13, freeing the lip 16 from the top flange of the rail, thus permitting the clamp structure, and in fact the entire ensemble to be removed from the bed.

While the foregoing description sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention what is claimed as new is:

1. An infusion standard comprising a bed rail attachable clamp, a post rising from the clamp, means slidable on the post for supporting an infusion bottle, said clamp consisting of upper and lower bed rail embracing elements, said upper element having a pair of vertically disposed openings therein, said lower element having a pair of vertically disposed rods detachably connected thereto and said rods are slidably mounted in the openings in the upper element, springs mounted on said rods and engaging said upper element for holding the elements together and in clamped position with respect to the rail, means on the upper ends of said rods for tensioning said springs and manual means for releasing said elements, said manual means consisting of a cam pivoted on said upper element and having a roller rotatably mounted thereon, that is interposed between the elements and when actuated in one direction the roller on said cam will engage said lower element to separate the elements against the action of the spring means, said clamp elements each provided with a flange for overlapping a corresponding portion of the bed rail.

References Cited in the file of this patent

UNITED STATES PATENTS

60	1,062,460	Hannan	May 20, 1913
	1,865,757	Honsowetz	July 5, 1932
	1,906,369	Christie	May 2, 1933
	2,134,823	Herrmann et al.	Nov. 1, 1938
	2,464,672	Clapp	Mar. 15, 1949
65	2,496,794	Hoch	Feb. 7, 1950
	2,678,792	Gallion et al.	May 18, 1954
	2,698,474	Tittl	Jan. 4, 1955

FOREIGN PATENTS

70	253,770	Switzerland	Nov. 16, 1948
----	---------	-------------	---------------