

No. 738,104.

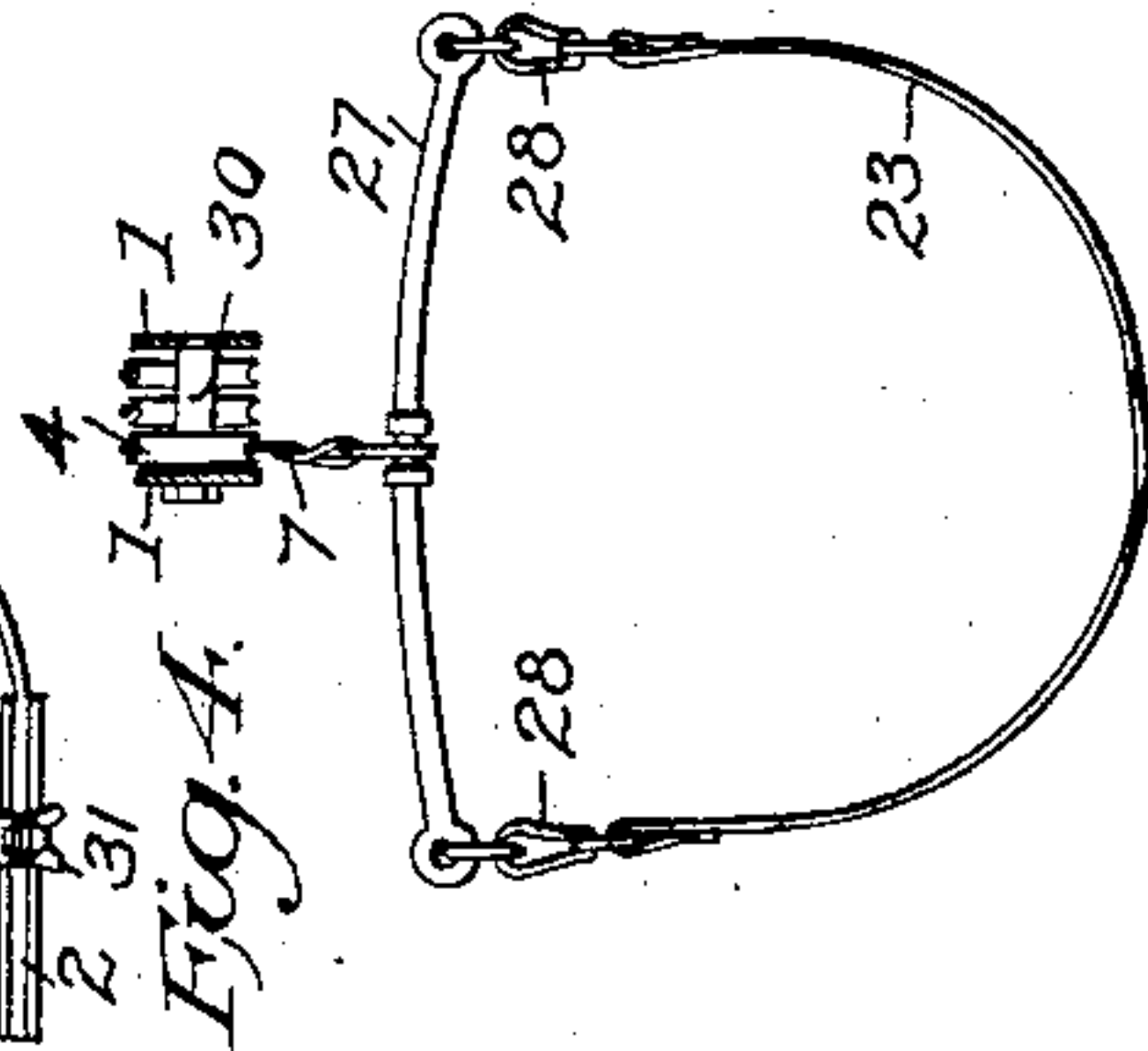
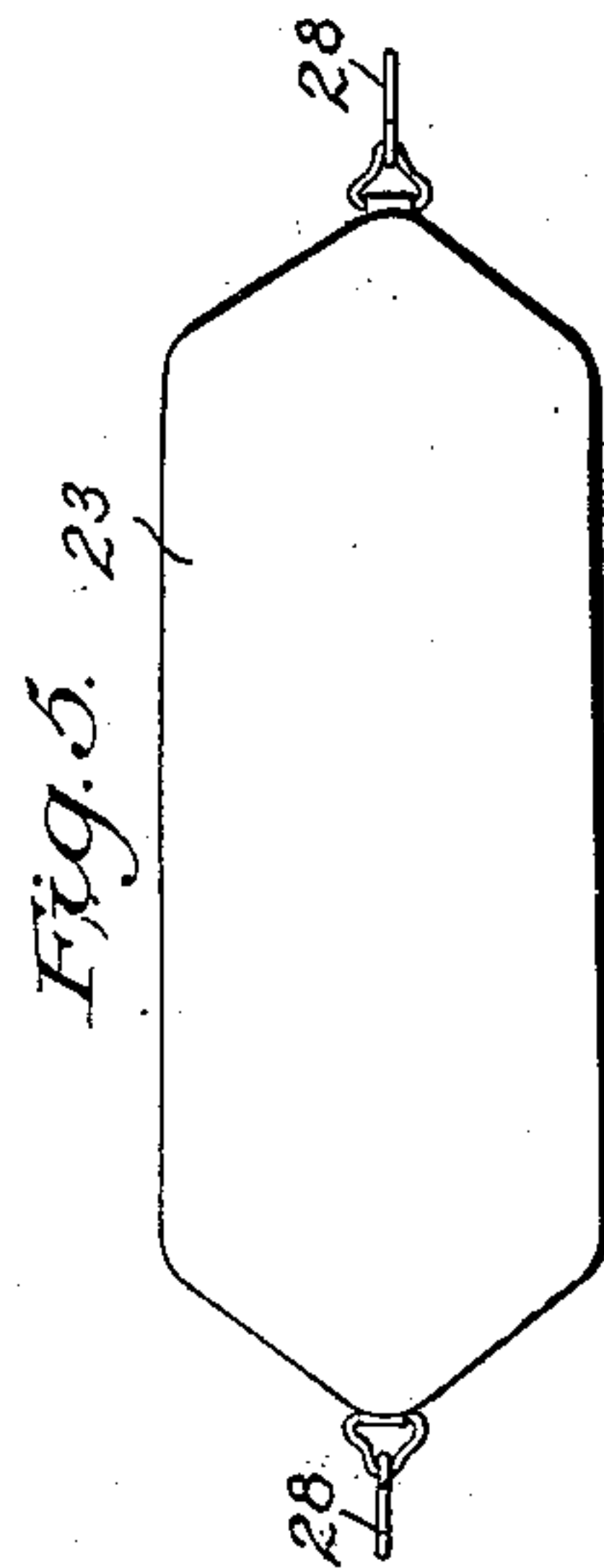
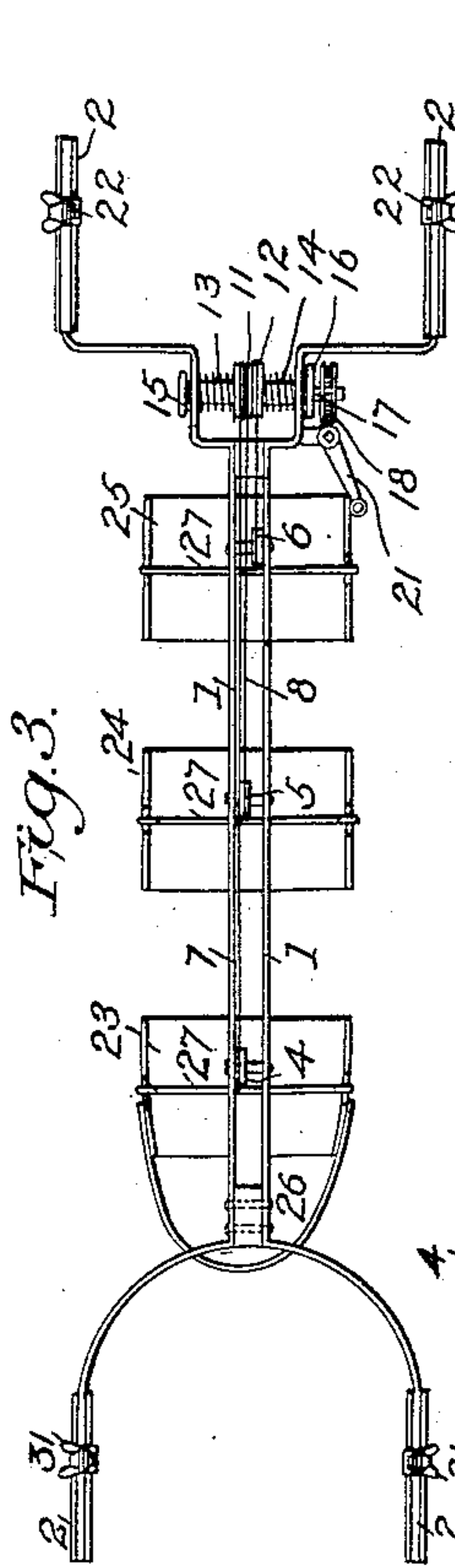
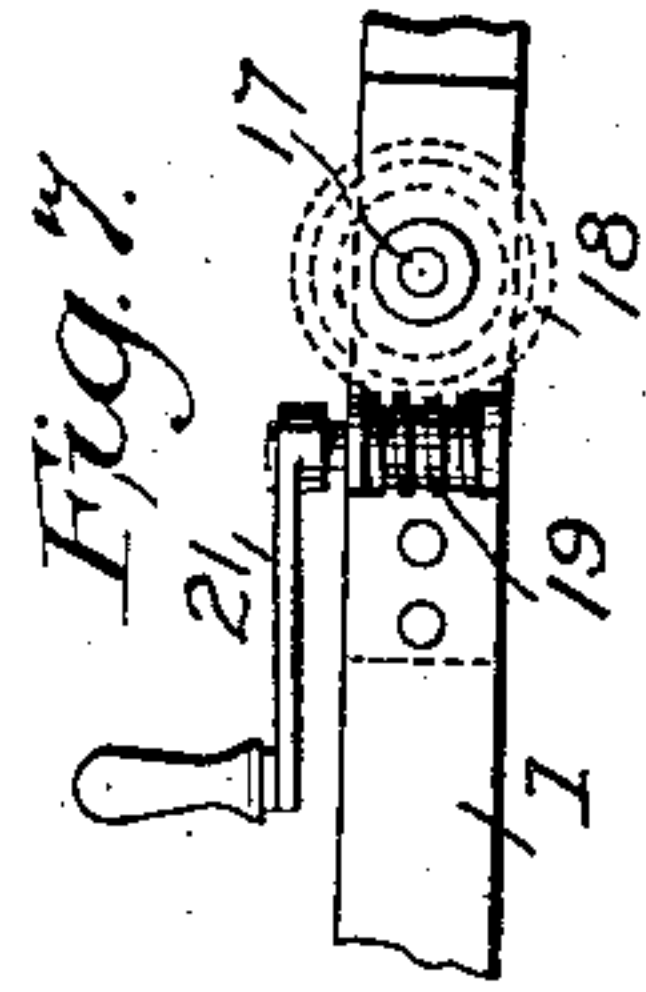
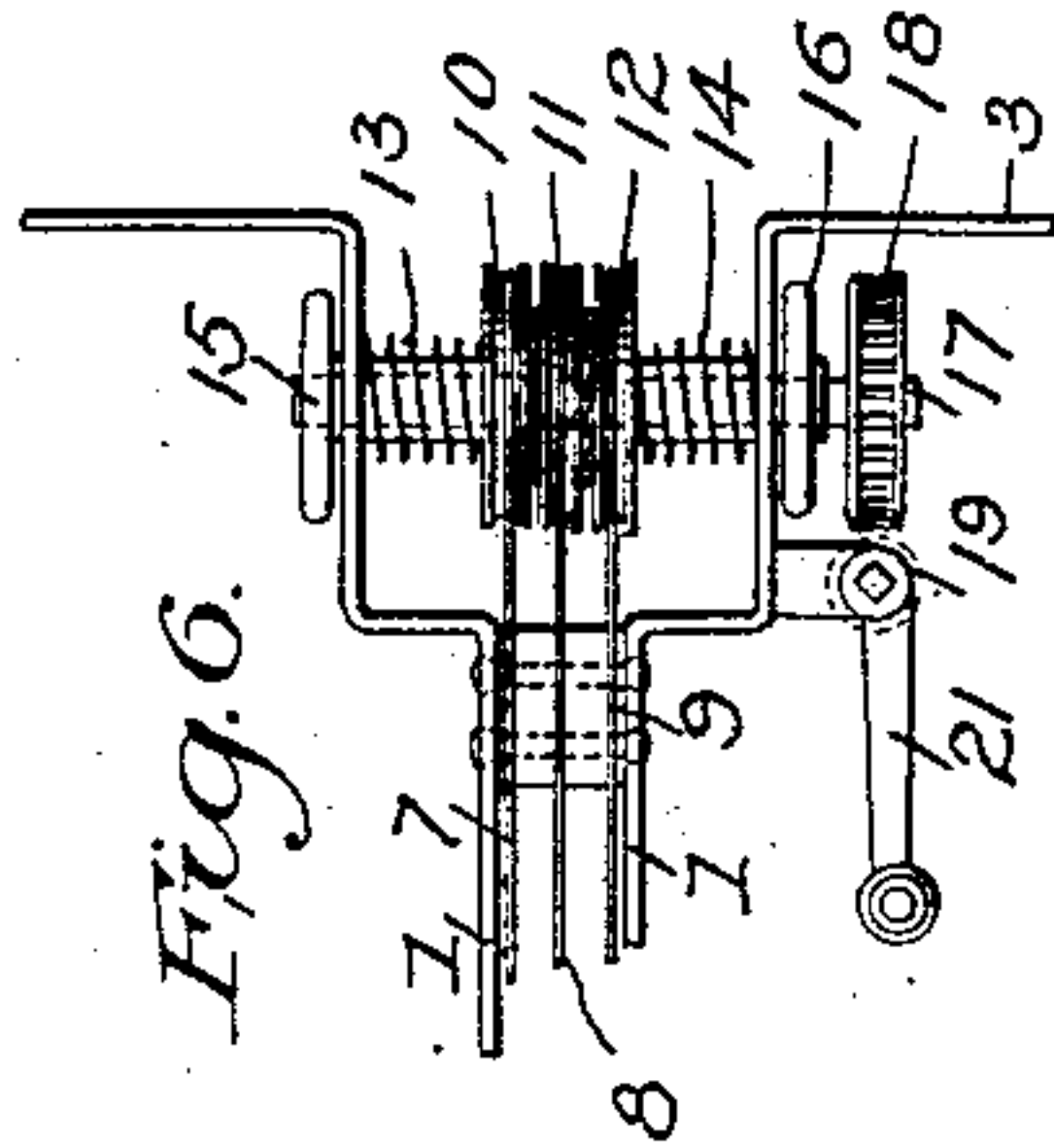
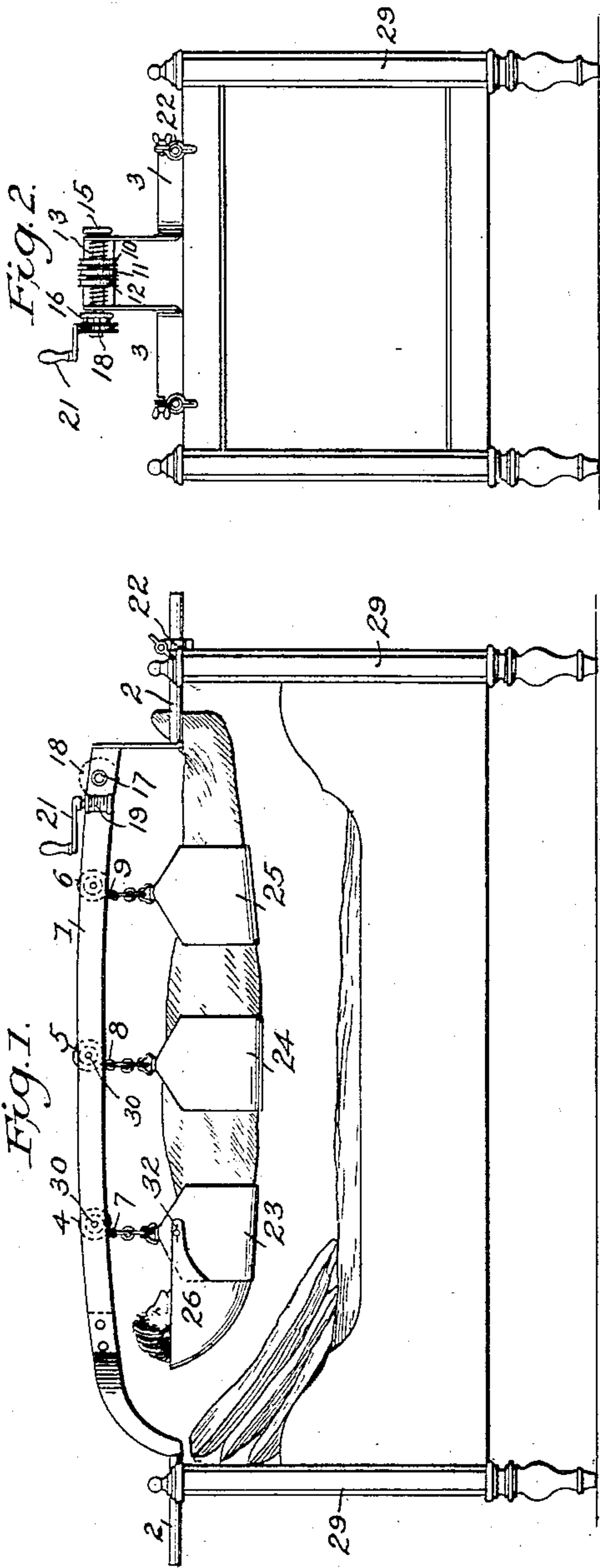
PATENTED SEPT. 1, 1903.

A. GAISER.

DEVICE FOR LIFTING SICK PEOPLE IN BEDS OR REMOVING  
THEM FROM SAME.

APPLICATION FILED SEPT. 27, 1902.

NO MODEL.



Witnesses:

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# UNITED STATES PATENT OFFICE.

AUGUST GAISER, OF OBERNDORF, GERMANY.

DEVICE FOR LIFTING SICK PEOPLE IN BEDS OR REMOVING THEM FROM SAME.

SPECIFICATION forming part of Letters Patent No. 738,104, dated September 1, 1903.

Application filed September 27, 1902. Serial No. 125,055. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUST GAISER, a citizen of the German Empire, residing at Oberndorf, in the Kingdom of Württemberg, Empire of Germany, have invented certain new and useful Improvements in Devices for Lifting Sick People in Beds or Removing Them from the Same, of which the following is a description, reference being had to the accompanying drawings, and to the figures of reference marked thereon.

This invention has for its object an apparatus for conveying sick persons, which at the same time is arranged over the bed of the sick person and may be used for lifting the person when airing or changing the bed-clothes.

The invention is shown in the accompanying drawings, in which—

Figure 1 is a side view of the apparatus attached to a bedstead; Fig. 2, an end view of Fig. 1; Fig. 3, a plan view of the device, and Figs. 4, 5, 6, and 7 detail views.

Rollers 4, 5, and 6 are arranged revolvably on pins 30 in a bar 1, both ends of which latter form forks 2, which may be fixed on a bedstead by means of set-screws 22 and 31. Ropes 7, 8, and 9 are drawn over these rollers and are wound on pulleys or rollers 10, 11, and 12, the ropes on the two outer pulleys 10 and 12 being capable of being wound up or wound off independently of one another as far as desired by means of hand-wheels 15 and 16, which may be turned from the outside. All three pulleys 10, 11, and 12 are arranged on a common shaft 17 and pressed against one another by means of spiral springs 13 and 14. The middle pulley 11 is fixedly secured to the shaft 17, and the outer pulleys are loose on the shaft and held at their inner sides in clutch with the middle pulley by the said springs 13 and 14, which encircle sleeves carried by said pulleys 10 and 12, and on the outer end of these sleeves are the hand-wheels 15 and 16. By first pulling outwardly on one of these wheels against the action of the spring the corresponding pulley 10 or 12 will be disengaged from the middle pulley 11 and may be rotated by the hand-wheel to raise or lower the corresponding band 23 or 25, to be presently described. By turning a crank-handle 21 a worm-wheel 18,

mounted on the spindle 17, may be turned by the worm 19, so that all three cord-pulleys 10, 11, and 12 are simultaneously rotated in the same direction and their ropes wound up or wound off uniformly,

At the ends of the rope carried over the rollers 4 5 6 curved pieces 27 with two horizontal arms are arranged, on which canvas bands 23 24 25 are fixed by means of snap-hooks 28, Fig. 4. Three of these canvas bands of suitable width usually suffice for one sick person. By suitably increasing the number of pulleys of course four or five canvas bands may be employed. A special canvas head-piece 26 is attached by buttons 32 to the front band 23, so that when the rope on the roller 4 is slackened not only the front band 23, but also the head-cloth 26 may be raised and lowered.

As explained in the foregoing, the front and rear canvas band may be adjusted independently of the others, or all three may be moved together. The forked ends 2 of the bar 1 may, as shown in the example in the drawings, be conveniently attached to a bedstead 29. At the same time the sick person may be conveniently transported by means of this device, which is easily releasable from the bedstead.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The combination with a suitable frame, of a winding-shaft mounted thereon, and provided with a fixed pulley, pulleys loose on the shaft and clutched thereto for movement therewith, or independent rotation thereon, ropes extending from the several pulleys, to different portions of the frame, and depending over suitable guides, and supports on the ends of the ropes; substantially as described.

2. The combination with a frame, having guide-pulleys at different points in its length, of a winding-shaft, having a fixed pulley, and loose pulleys clutched thereto, for simultaneous or separate rotation, ropes leading from the pulleys over said guide-pulleys, horizontal arms on the ends of the ropes and bands or slings separably connected at their ends to the ends of the said arms.

3. The combination with the frame and

the guide-pulleys, of a winding-shaft provided with a fixed pulley, loose pulleys on the shaft provided with hand-wheels, springs pressing the loose pulleys into clutch with  
5 said fixed pulley, ropes leading from said pulleys over the guide-pulleys and slings or bands on the ends of the ropes.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUST GAISER.

Witnesses:

AUGUST DRAUTZ,  
ERNST ENTENMAN.