

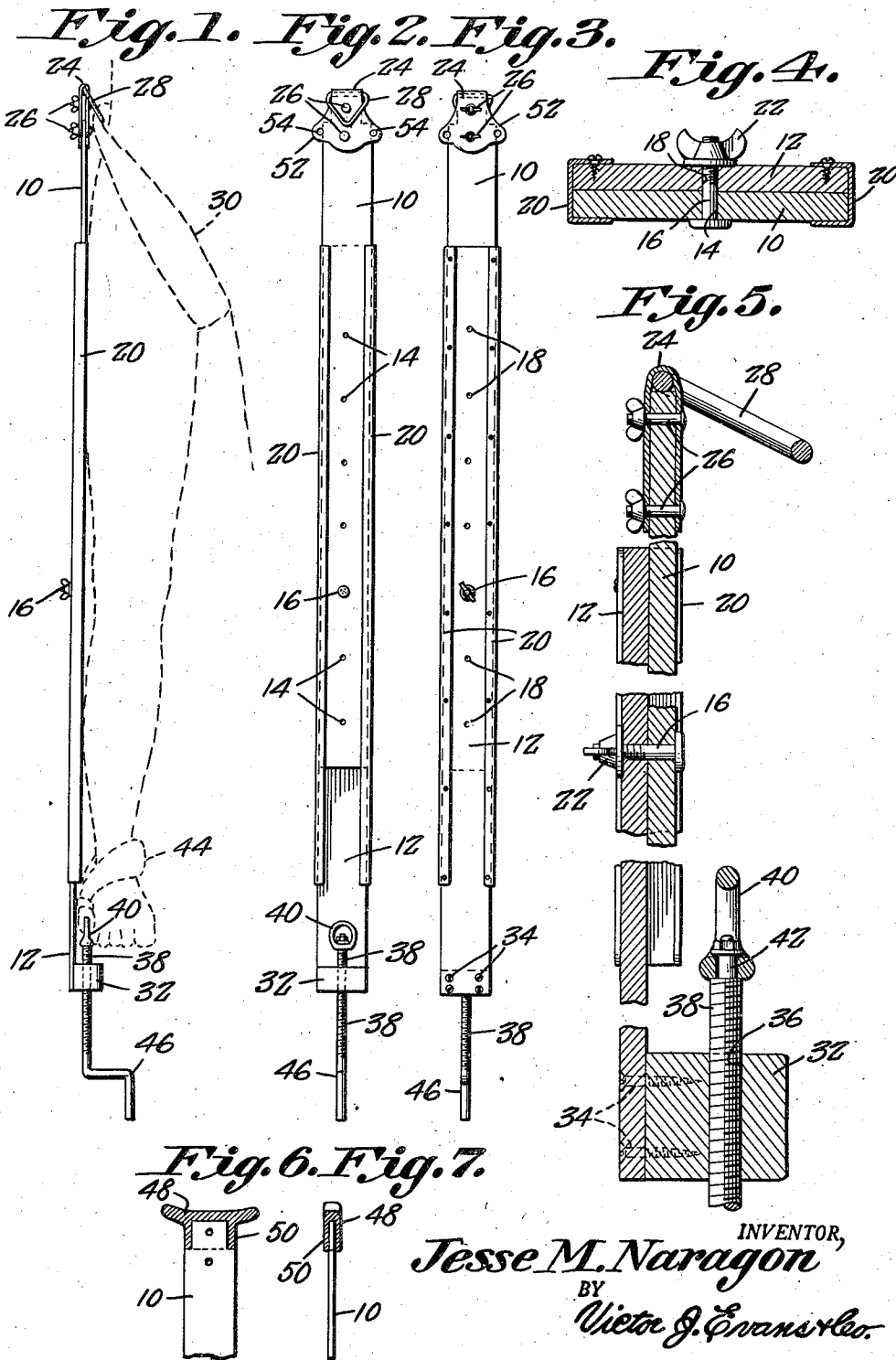
May 21, 1946.

J. M. NARAGON

2,400,772

SPLINT

Filed Feb. 25, 1943



UNITED STATES PATENT OFFICE

2,400,772

SPLINT

Jesse M. Naragon, Steubenville, Ohio

Application February 25, 1943, Serial No. 477,117

1 Claim. (Cl. 128—85)

My invention relates to surgical appliances, and has among its objects and advantages the provision of an improved traction splint.

In the accompanying drawing:

Figure 1 is a side view showing the splint applied to the patient's leg.

Figure 2 is a face view.

Figure 3 is a view of the opposite face.

Figure 4 is an enlarged cross sectional view.

Figure 5 is an enlarged and fragmentary longitudinal sectional view.

Figure 6 is a sectional view of an interchangeable crutch head, and

Figure 7 is a similar view with the crutch head rotated 90 degrees.

In the embodiment of the invention selected for illustration, I make use of two wood slats or bars 10 and 12 arranged face to face. A plurality of openings 14 are spaced longitudinally of the bar 10 for selective reception of a bolt 16 carried by the bar 12 intermediate the ends of said bar. Similar openings 18 are provided in the bar 12. The bolt 16 slips easily through aligned openings 14 and 18 so that the bars may be easily and quickly adjusted to vary the length of the splint body.

The edge margins of the overlapping bars are embraced by two metallic channels 20. Both channels are fixed to the bar 12, but the bar 10 slides freely relatively to the channels. These channels extend in opposite directions beyond the bolt 16 to restrain the two bars from relative rotation about the axis of the bolt 16, in addition to reinforcing the bars against lateral flexing.

Because of the single bolt 16, the bars 10 and 12 are easily and quickly shifted to attain the best length of splint body for different working conditions. The channels 20 are light in weight and strengthen the splint body in such manner as to permit the use of relatively small and light weight bars 10 and 12. A wing nut 22 is employed on the bolt 16 to facilitate shifting and tightening of the bolt.

To the outer end of the bar 10 is attached a metallic loop 24, as by bolts 26. A ring 28 is loosely retained in the loop 24 as an attaching means for a strap 30 which may be passed under the crotch of the patient.

A wood block 32 is attached to the outer end of the bar 12, as by screws 34. This block is provided with a threaded opening 36 for coaction

with a screw 38 paralleling the bar 12, but spaced a short distance therefrom to make room for a ring 40 having a swiveled connection 42 with the screw 38. This ring serves as a fastening means for an ankle strap 44. After application of the splint and attachment of the two straps 30 and 44, the necessary traction is applied through rotation of the screw 38, such rotation being facilitated by a crank 46 comprising a bent extent of the screw.

While the splint is shown as performing a leg service, the splint is equally serviceable for arm duty. The adjustability of the splint renders it useful for both adults and children. As shown in Figures 6 and 7, the loop 24 may be replaced by a crutch head 48 having a socket 50 shaped to fit over the outer end of the bar 10. The loop 24 is, as shown in Figures 2 and 3, provided with ears 52 having openings 54 for the reception of a belt which may be used in fastening the splint to the patient, in addition to the straps 30 and 44 which are ample in most cases.

Without further elaboration, the foregoing will so fully explain my invention, that others may, by applying current knowledge, readily adapt the same for use under various conditions of service.

I claim:

A splint comprising two bars arranged face to face, one of said bars being provided with a longitudinal series of relatively spaced openings, a bolt extending loosely through the other bar intermediate the ends of the bar and selectively receivable in said openings to restrain the bars from relative endwise movement, channels attached to said other bar and embracing the edge margins of both bars, the channels extending in opposite directions beyond the bolt to restrain the bars from relative pivotal movement about the bolt and to substantially reinforce the bars, strap supporting means comprising a triangular shaped loop having a triangular shaped ring loosely retained therein carried by the outer end of the bar provided with the openings and secured thereto by bolts, said ring adapted to receive the strap which is passed under the crotch of a patient, a block attached to said other bar below the channels, and a traction screw threadedly connected with the block and provided with a strap engaging means adapted to be inserted over the ankle of a patient.

JESSE M. NARAGON.