G. H. BROWN & R. C. DAVIS.

Fracture-Splint.

No. 161,323. Patented March 30, 1875.

Fig. 1

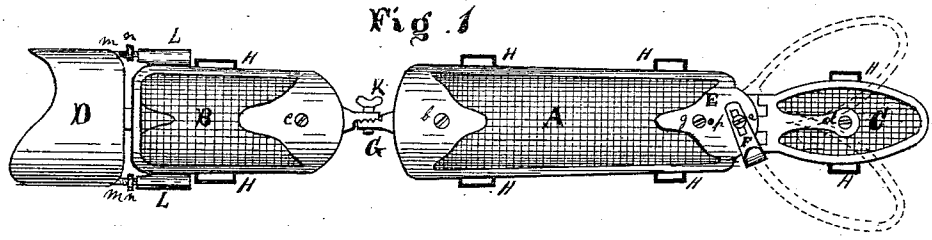


Fig. 2

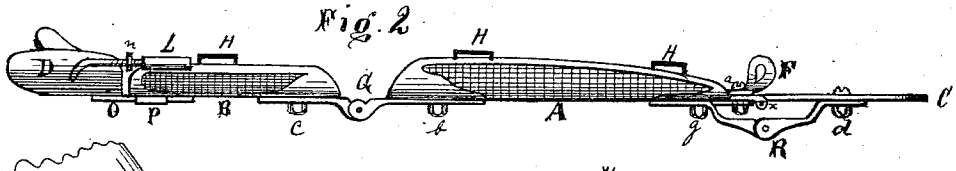
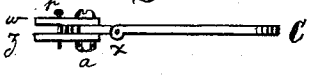


Fig. 5

Fig. 3

Fig. 6



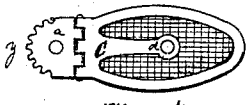
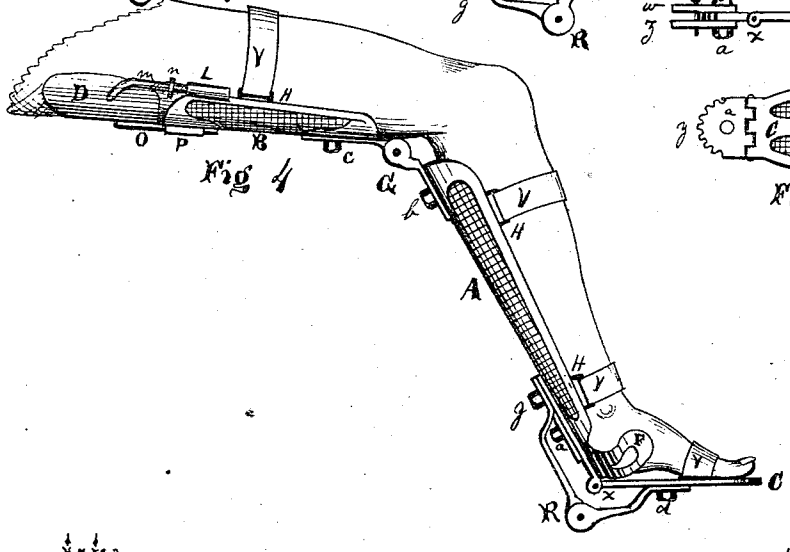


Fig. 7

Fig. 4



Witnesses;
C. P. Jacobs
H. P. Hood,

Inventors.
George H. Brown
Robert C. Davis

UNITED STATES PATENT OFFICE.

GEORGE H. BROWN AND ROBERT C. DAVIS, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN FRACTURE-SPLINTS.

Specification forming part of Letters Patent No. **161,323**, dated March 30, 1875; application filed July 21, 1874.

To all whom it may concern:

Be it known that we, GEORGE H. BROWN and ROBERT C. DAVIS, of Indianapolis, Indiana, have invented an Adjustable Wire-Gauze Combined Leg and Arm Splint, of which the following is a specification:

The object of our invention is to connect two or more sections of splints by means of a hinge-joint that will allow the sections of the splint to be adjusted laterally and vertically in any desired position; and the said hinge is constructed with a pivot, a ratchet, and pin, or its equivalents, so as to hold the joints rigidly in any position.

Figure 1 represents a plan of the splint embodying our improvement. Fig. 2 represents a side elevation of the same. Fig. 3 represents an adjustment of the splints to an arm. Fig. 4 represents an adjustment of the same to a leg. Fig. 5 represents the connecting-hinge of the splints. Figs. 6 and 7 represent a plan and side elevation of the hand or foot section of the splint and its connection with the fore-arm section.

A, B, and C represent three sections of the splint, and are formed of wire-gauze or other suitable material, and bound around the edges, so as to hold them in the proper shape. D represents the section that is used only when the splints are applied to legs, and is designed to lengthen out the splint for the support of the thighs, and is connected with section B by a slide, O, which is made fast to D, and slides into the case P, that is secured to section B on the under side of the splint. It also has an adjustable connection at each edge, as at *m* L. *m m* are two wires secured on the section D. These wires have a screw-thread cut on them for the use of the adjustable nut *n*. The wires *m m* are fitted into sockets L L, and the length can be adjusted by the nuts *n n*. H H represent strap-eyes, and are made fast to the sections A, B, C, and D at proper places for fastening the splints to the limbs. G and R represent the adjustable hinges that are used to connect the splints A, B, and C together. The joints of these hinges are circular disks, having the faces corrugated, and are held together in any desired angle by the thumb-screw K. Each leaf of the hinges G and R is provided with slots S and S, for the purpose of adjustment longitudinally. The hinge G connects section A and B together, and the length of the space between the two is regulated by means of the slots S S. The hinge R does not connect the section A and C together, but is used to fasten the two sections in any desired angle, as represented in Figs. 3 and 4.

Figs. 6 and 7 show the connection of section A and C, which is made by a common hinge-joint, *x*. One leaf of the hinge is fastened to section C, and the other leaf has a round end with cogs or notches *y* in it, and a hole, *a*, at the center. This leaf is inserted between two stationary plates, *w* and *z*, that are made fast to the small end of section A, and secured by a bolt or thumb-screw. This arrangement allows the adjustment of section C laterally on either side, as represented in Fig. 1 by dotted lines, and is held at any desired position by the pin *p*. F is a side guard to be adjusted by a slot in any desired position against the wrist or foot.

To adjust our combined leg and arm splints, loosen the nuts or thumb-screws *e*, *b*, *g*, *a*, and *d*, and place the splint on the limbs. Then get the proper position, and make them fast. Then secure the straps V V.

There is a construction of splints made of wire-gauze and bound around the edge with any suitable material, so as to hold them in their proper shape, and united together with adjustable hinges to allow a vertical adjustment. This arrangement we do not broadly claim, as it is old.

What we desire to claim and secure by Letters Patent is—

The adjustable hinge-joint *x*, in combination with the section C and A of the splints, pivot-bolt *a*, ratchet *y*, and pin *p*, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

GEORGE H. BROWN.
ROBERT C. DAVIS.

Witnesses:
C. P. JACOBS,
H. P. HOOD.