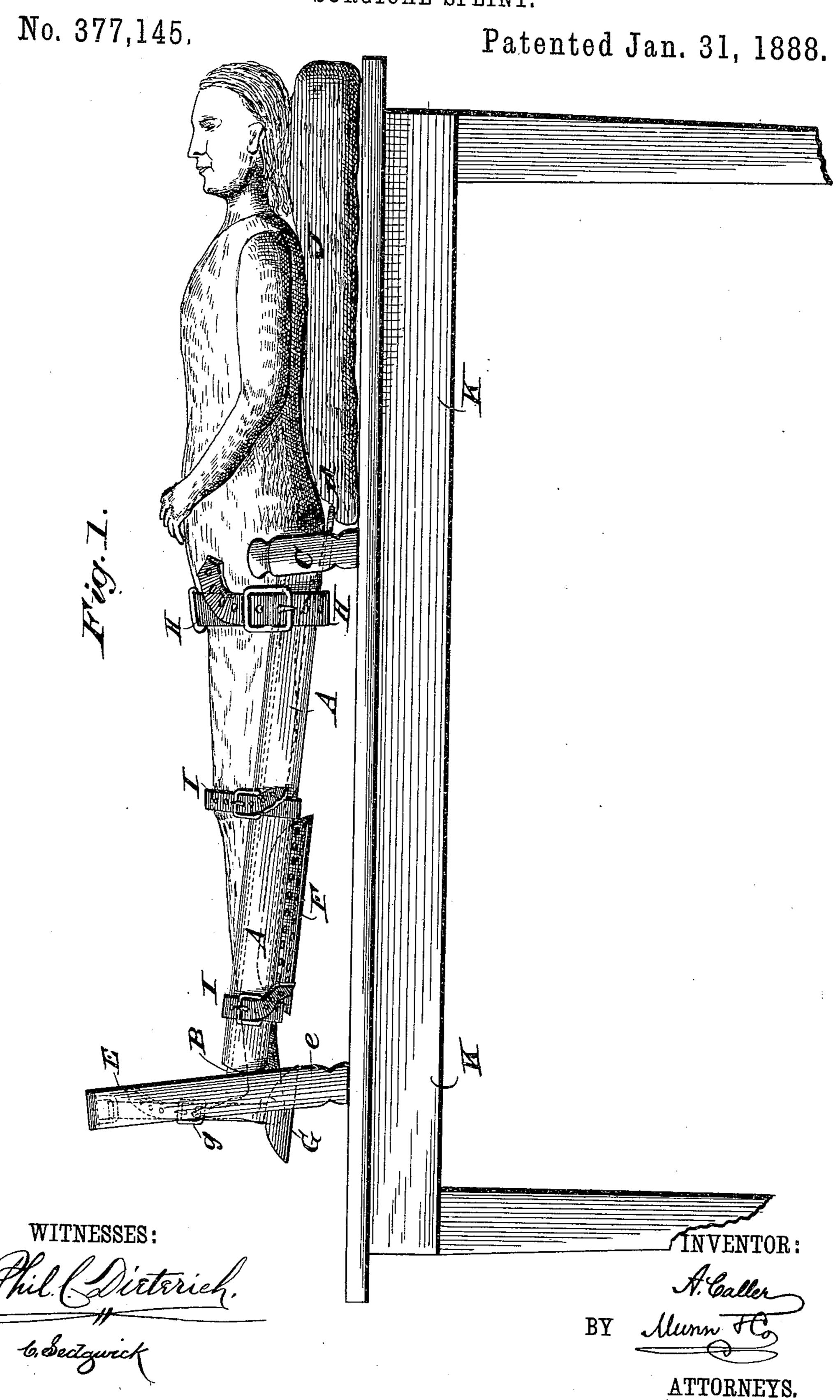
A. CALLER.

SURGICAL SPLINT.

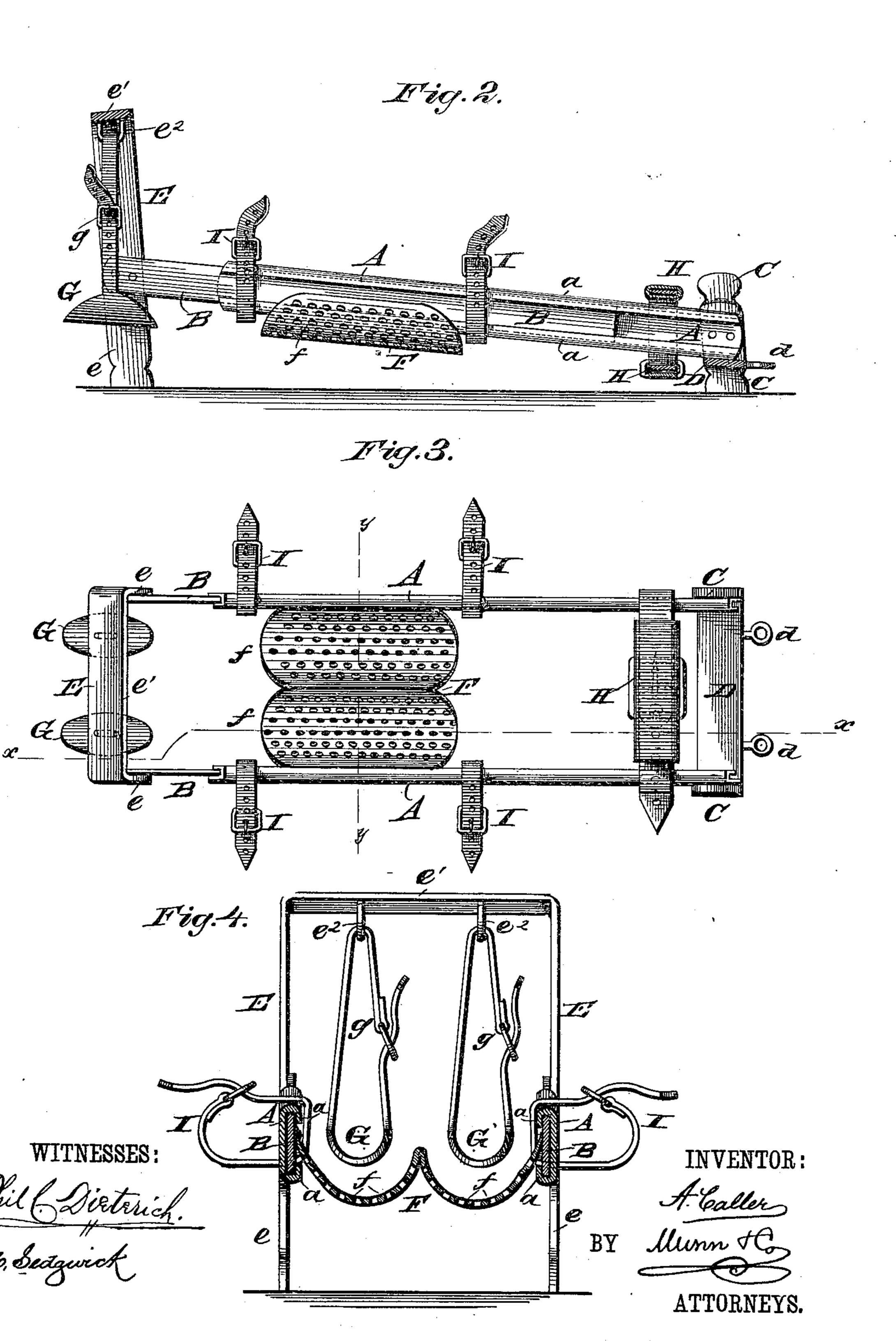


A. CALLER.

SURGICAL SPLINT.

No. 377,145.

Patented Jan. 31, 1888.



United States Patent Office.

ANNIE CALLER, OF ALBANY, NEW YORK.

SURGICAL SPLINT.

SPECIFICATION forming part of Letters Patent No. 377,145, dated January 31, 1888.

Application filed August 16, 1887. Serial No. 247,134. (No model.)

To all whom it may concern:

Be it known that I, Annie Caller, of Albany, in the county of Albany and State of New York, have invented a new and Improved Surgical Splint, of which the following is a full,

clear, and exact description.

My invention relates to a surgical splint adapted to hold reset or injured or sore limbs while plaster molds are hardening on them, or while sores are healing; and the invention has for its object to provide a simple, inexpensive, and effective apparatus of this character, which may be applied easily and quickly, and is more especially designed for holding limbs which have been broken and reset while treating bow-legged or knock-kneed children.

The invention consists in certain novel features of construction and combinations of parts of the surgical splint, all as hereinafter fully

27 described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate

corresponding parts in all the figures.

Figure 1 is a side elevation showing a child laid upon an operating-table and my improved surgical splint or fracture apparatus applied to hold the child's limbs in plaster casts or molds. Fig. 2 is a longitudinal sectional elevation of the splint, taken on the line xx, Fig. 3. Fig. 3 is a plan view of the splint; and Fig. 4 is vertical sectional view taken on the line

y y, Fig. 3. The splint is made with opposite extensible 35 side rails, each consisting of a metal bar, A, provided at opposite edges with inturned lips or flanges a a, which form a pocket or guide to receive the other part or metal bar, B, of each rail and hold it to allow it to be slid along the 40 bar A. The back ends of the bars A A are provided with short posts or feet C C, which and, it may be said, bars also—are connected by a cross-bar, D, to which eyes or rings d dare attached to admit the fingers, to allow more convenient extension of the side rails of the splint when adjusting it lengthwise to patients of different stature. The forward ends of the side-rail bars B B are fixed to the opposite vertically - ranging side posts, e e, which are 50 connected at the tops by a top cross-bar, e',

said parts e e e' forming the foot-frame E of the splint. The bars B B are connected to the

frame E at sufficient height to cause the side rails of the splint to incline downward from the feet toward the head of the patient sufficiently to prevent excessive flow of blood to the patient's feet or swelling of the feet or limbs while being held by the splint, in a man-

ner presently explained.

To the opposite bars B B of the side rails of 60 the splint are fixed the opposite side edges of a metal plate, F, which is bent upward lengthwise at the center and opposite edges to form two concaved rests, f f, to receive the calves of both legs of the patient. The plate F is 65 perforated, as clearly shown in the drawings, to admit air to the plaster casts in which the patient's legs are bound up and facilitate the quick setting of the plaster around the limbs. Foot-rests G G, preferably made of harness- 70 leather and padded on the inside, are hung, by straps gg, from eyes, staples, or rings e^2e^2 , fixed to the top cross-bar, e', of the foot-frame E. A strap, H, is passed around the side rails of the splint, and is intended to encircle the patient's 75 body at or near the hips, and straps I I, passed around each of the splint side rails, are intended to bind the plaster-incased limbs to the rails.

The operation of the splint is very simple 80 and effective and as follows: After a child's bowed or otherwise crippled limbs are broken and reset straight, and are incased in plaster in the usual or any approved way, it is the work of less than one minute for two persons 85 to slip the child into the splint, or to slip the splint under the reset limbs, and while the feet are placed in the rests G G to buckle the straps. H I around the body and plaster-incased limbs and hold the limbs securely and steadily in 90 place while the plaster cast or mold sets or hardens around or upon them to await a proper knitting together of the reset bones, so as to leave the formerly crooked or crippled limbs straight and strong when the splint and the 95 plaster cast or mold are removed. The drawing Fig. 1 shows the child resting by the head, shoulders, and back on a pillow, J, placed on the operating-table K.

It is obvious that this splint may be so quickly 100 and correctly adjusted that all dangers usually attending the holding of the reset and plaster-incased limbs by the hands—such as throwing the broken bones out of place—are entirely

obviated, and the services of two persons for less than one minute in applying the splint effects a large saving of time over that needed to hold the limbs by hand until the plaster hardens, and which usually requires the work of two persons for from two three hours.

The splint may be used with excellent results for holding sore limbs in place while heal-

ing, as will readily be understood.

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

1. A surgical splint made with side rails and a plate connected thereto and bent to form concave rests for both legs of the patient, substantially as herein set forth.

2. A surgical splint made with extensible or telescoping side rails and a plate connected to the rails and bent to form concave rests for both legs of the patient, substantially as herein set forth.

3. A surgical splint made with extensible or telescoping side rails supported so as to incline downward from the feet toward the head of the patient, and supports for the calves of the patient's legs, attached to the side rails, substantially as herein set forth.

4. A surgical splint made with side rails, a plate connected thereto and bent to form rests for both legs of the patient, a strap or band 30 for securing the patient at the hips, or thereabout, to the side rails, and straps for securing the patient's legs one to each side rail of the splint, substantially as herein set forth.

5. A surgical splint made with side rails, a 35 plate connected thereto and shaped to form rests for both legs of the patient, and separate rests for the feet of the patient, connected to the foot-frame of the splint, substantially as

herein set forth.

6. The combination, in a surgical splint, of opposite extensible side rails, A B A B, posts C C, a cross bar, D, connecting said posts or side rails, a foot-frame, E, to which the side rails are attached, a plate, F, connected to the 15 side rails and bent to form two concaved legrests, f f, foot-rests G G, suspended from the frame E, and straps H I, adapted to secure the patient's limbs, substantially as described, for the purposes set forth.

ANNIE CALLER.

Witnesses:

J. L. HENNING, HARRIET FRY.