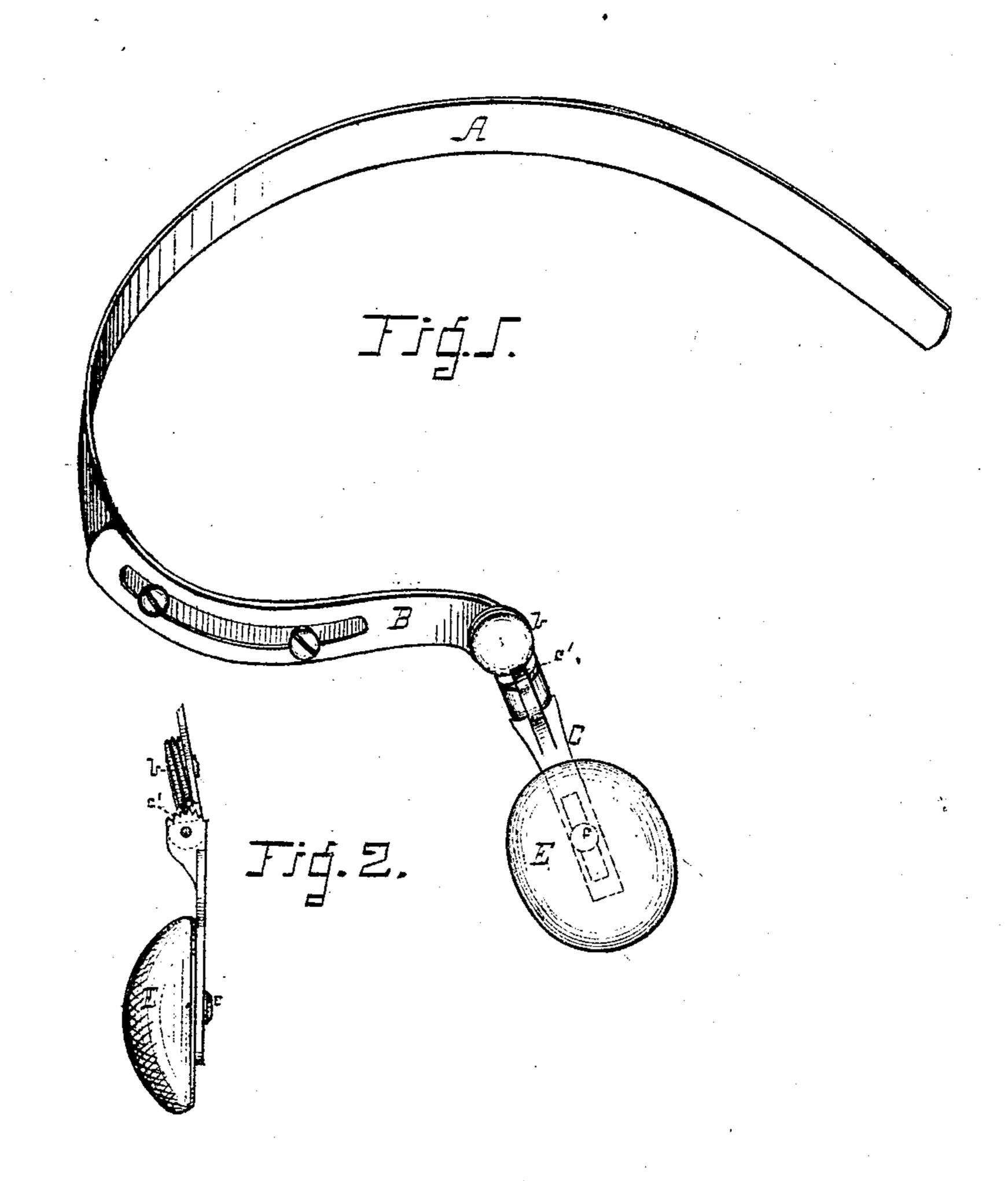
1.5.51111/h

17/1/5/5.

10.1035/6.

Patented May 24. 1870.



ERERRES:

H. Germ. I. Noyes. mn. J. Smith by H. W. Beadle, atty.

## Anited States Patent Office.

WILLIAM JAMES SMITH, OF TREVILLIANS, VIRGINIA, ASSIGNOR TO HIM-SELF AND GEORGE W. MAY, OF SAME PLACE.

Letters Patent No. 103,516, dated May 24, 1870.

## IMPROVEMENT IN TRUSSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM JAMES SMITH, of Trevillians, in the county of Louisa and State of Virginia, have invented a new and useful Improvement in Truss; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

This invention relates to that class of trusses which are provided with adjustable pressure-pads, and consists in the employment of a button-screw upon the truss proper, in connection with teeth or cogs upon the rear end of the hinged arm supporting the pad, for the purpose of enabling the truss to be easily and accurately adjusted by the patient to suit the requirements of his case.

The details of construction will be fully described

hereinafter.

In the drawings—

Figure 1 represents a perspective view of my improved truss, and

Figure 2, a side elevation of a portion detached.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents a suitable curved metallic strip, to which is attached, by means of set-screws, the slotted end piece B.

O represents a slotted arm, which is attached to the piece B by means of a hinge-joint, as shown.

E represents the pad, which is secured to the arm C by means of the screw c.

The rear end of the arm C, it will be observed, is provided with teeth or cogs, with which the buttonscrew b, located upon the piece B, engages.

The operation is as follows:

By means of the slot in the piece B, and the setscrews which secure it to the strip A, the length of the truss can be adjusted at will.

By means of the slot in the arm C, and the screw which secures the pad to it, the relative distance of the pad from the piece B can also be changed when desired.

By means of the hinged arm C, and its teeth c, and the button-screw b, the position of the pad and its pressure may be nicely adjusted to suit the requirements of the case. This is accomplished, it will be readily understood, by simply revolving the buttonscrew, the threads of which engage with the teeth c', and cause them to rise or fall, according to the direction in which the screw is revolved. This movement of the teeth causes the front end of the arm, which is, in fact, the long arm of a lever, to be moved in the opposite direction.

As the slightest movement of the screw will cause the pad to advance or recede, it is manifest that very nice adjustments can be made by this device.

The truss, as a whole, is simple in all its parts, and not liable to get out of order. It is also well adapted for the purposes for which it is intended.

I do not claim the manner of adjusting the truss proper by means of a slot and set-screws; nor do I claim, broadly, the employment of a screw for the adjustment of a pad; but,

Having thus fully described my invention.

-What I claim as new, and desire to secure by Let-

ters Patent, is—

In a truss of substantially the described construction, the button-screw b upon the piece B, in combination with the teeth c upon the pad-arm C, when the parts are arranged as and for the purpose described.

This specification signed and witnessed this 27th day of April, 1870.

WILLIAM J. SMITH.

Witnesses:

I. W. VALENTINE, C. VALENTINE.