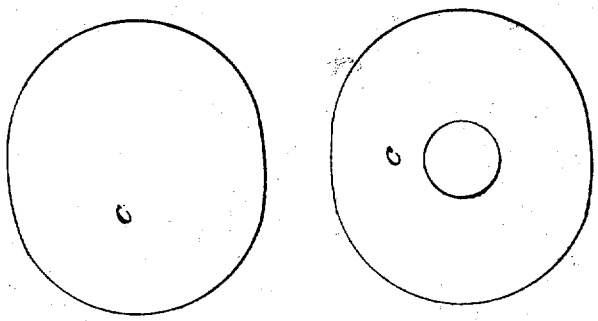
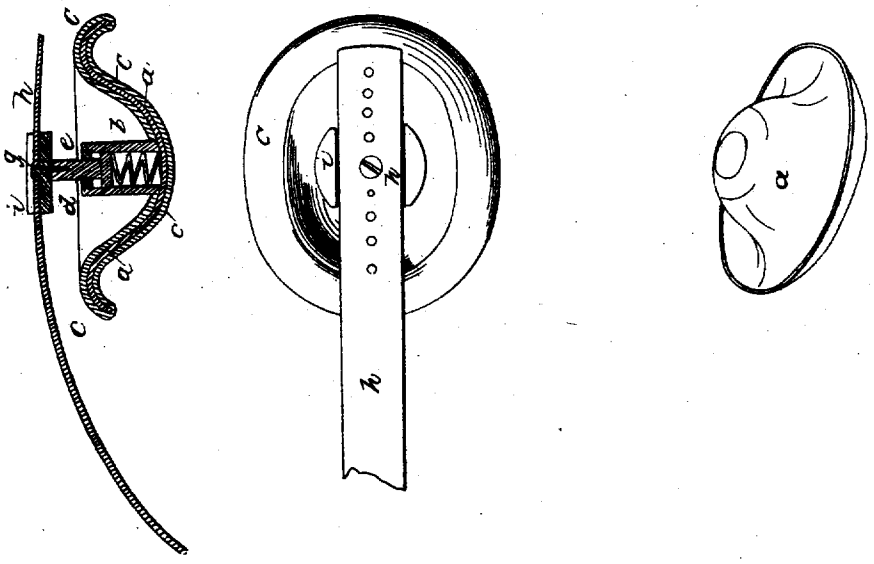
8863X

J. J. HEINTZELMAN.

TRUSS.

Patented June 6, 1835.





THE MORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

June 6 1835

6/6/1835

John S. Hentzelman
Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said John S. Hentzelman himself of his improvement in the Trap for the use of Stoves &c.

To all to whom these presents shall come. Be it known that I John S. Hentzelman of the City and County of Philadelphia and State of Pennsylvania have invented a new and useful improvement in the trap for the use of stoves for which Letters Patent were granted to me on the 21st day of July 1831. and which I the said Hentzelman improved Trap Pan and that the following is a full and exact description of the construction and operation of the same as invented or improved by me. My improvement consists in the construction of the pan which is as follows. A circular or oval dish is made of strong tin, sheet copper, brass or other metal of proper thickness, the same elasticity and form of say 2 inches diameter, a portion of the surface at the centre, about equal in diameter to half the diameter of the dish, is by means of dies, punches or any other convenient means punched up or raised so as form a spherical or spheroidal convexity towards the front, or that side of the dish which is to be next to the patient, and a corresponding concavity on the other side or back, the remaining annular surface or ring is punched in a similar manner, concave on the front side & convex on the back. These inflexions may all be made at one operation by dies such as are in ordinary use. In the centre of the cavity in the back is secured by soldering a small hollow box or metal cylinder say ½ of an inch in diameter and ½ of an inch long more or less, this cylinder is intended to receive the attachment which secures the pan to the bow or spring of the trap as hereinafter mentioned. The metallic dish being thus formed I apply to the two [illegible] of metal, either more may be, pieces of sheet caoutchouc or gum [illegible] of proper sufficient stiffness, cut to the concavities and

convexities of the disk, to match all across on the outer circumference of the latter an opening being also cut in the back piece for the protrusion of the cylinder, the disk being now placed between these sheets they are pressed closely in a pair of dies with cavities and convexities nearly corresponding with the inflections of the disk (except a depression for the cylinder and sufficiently larger to receive the additional thickness of the sheets and to mould a full convex edge or ring beyond the angular cavity of the front of the pad the die having been previously heated to a proper degree, by which means in a few minutes the edges of the gum elastic sheets are firmly united together and the pad retaining the figure and impress given by the dies, is ready for attaching to the bow which is done in the following manner. The cylinder hereinbefore mentioned is closed by a circular head or plate having a hole in its centre and furnished with a screw thread at its circumference which screws or takes into a corresponding thread in the upper part of the cylinder. A strong metallic pin or shaft passes through the hole in this plate, the part within the cylinder having a broad circular head nearly of equal diameter with the cylinder which rests or bears on a spiral steel spring dispose loosely into the cylinder, the other end of the pin projecting about 1/8 of an inch beyond the plate with a screw hole in its centre to receive the screw which attaches the bow or spring of the truss as follows. The end of the bow or spring which may be 1/2 an inch broad and thin as the required degree of strength will permit being introduced into a slot or mortice made in an oblong button or piece of brass, a screw is passed through the button and spring which takes in the end of the pin above mentioned, and confines the whole together, the length of the slot allowing a slight lateral motion to the bow, which in connection with the action of the spiral spring upon which the head of the pin bears, forms a sort of universal joint, and admits of an easy rolling motion of the bow or pad without the la[illegible] being in the least displaced or its pressure abated. In the pad for femoral cases the attachment is the same only differs from the ordinary kind that pad in common use [illegible]tuffed with wool) by being formed of dies as herein described of a metal

metal with, covered with gum elastic, without stuffing. This Truss is to be applied in the usual manner, the dimensions of the pad as also the degree of its convexity being varied to suit the circumstances of the case and the indications of the disease, the regulation of which is therefore left to the judgement of the practitioner or the patient. Now all that I have claim as my invention and improvement and for which I ask Letters Patent is the mode of shielding the metal with of the pad between the two sheets of caoutchouc impregnated and united as herein described and set forth instead of placing it as formerly between them, and dispensing with a covering of silk, leather, or any other such like substances, thereby rendering the whole more simple and durable, and perfectly easy to be cleansed without soiling. In testimony that the foregoing is a true specification of my said improvement, I have hereunto set my hand at the City of Washington this 15th day of May 1835

Witness

Wm. J. Steiger

Henry Stettinius

Jno. J. Hentzelman