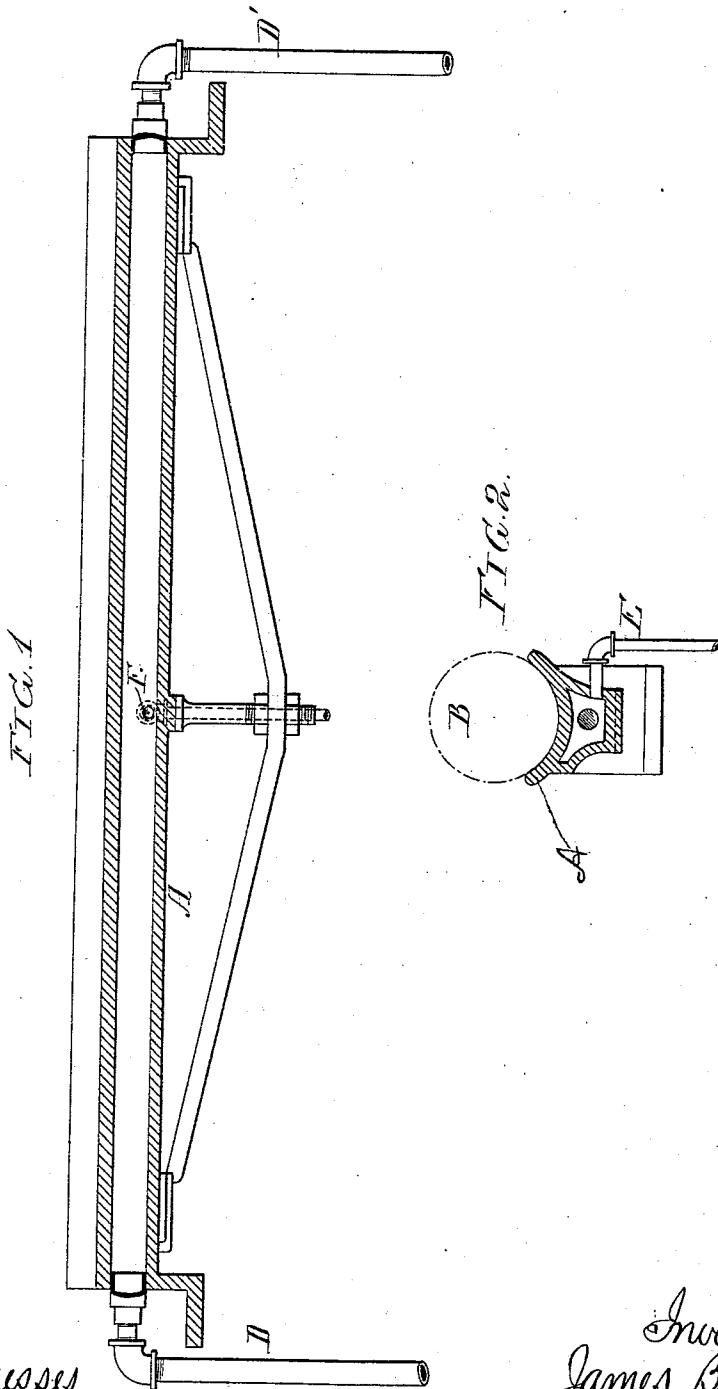


J. BUTTERWORTH.  
Cloth-Pressing Machine.

No. 211,966.

Patented Feb. 4, 1879.



Witnesses  
Henry Howson Jr.  
Harry Smith

Inventor  
James Butterworth  
by his Attorneys  
Howson and Son

# UNITED STATES PATENT OFFICE.

JAMES BUTTERWORTH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND CHARLES C. BUTTERWORTH, OF SAME PLACE.

## IMPROVEMENT IN CLOTH-PRESSING MACHINES.

Specification forming part of Letters Patent No. **211,966**, dated February 4, 1879; application filed December 2, 1878.

*To all whom it may concern:*

Be it known that I, JAMES BUTTERWORTH, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Cloth-Pressing Machines, of which the following is a specification:

My invention relates to an improvement in that class of cloth-pressing machines in which a rotating cylinder is combined with a steam-heated bed adapted to the cylinder; and the object of my invention is to impart to the bed a more uniform heat than it has heretofore received.

In the accompanying drawing, Figure 1 is a longitudinal section of the bed of a pressing-machine, showing my improved mode of heating it by steam; and Fig. 2 is a transverse section.

A is the steam-heated bed of the pressing-machine, and consists of a chambered casting, secured at its opposite ends to the frame of the machine, and made concave at the top to accord with the circumference of the roller B, as shown in Fig. 2, the fabric to be pressed passing between the said roller and the concave surface of the bed.

The above-described parts are common to ordinary pressing-machines for cloth, &c.

As wide fabrics have to be subjected to the process of pressing in these machines, it is necessary to make the roller and bed proportionately long—of such a length, indeed, that difficulty has been experienced in maintaining the bed at that uniform heat throughout which is necessary for the proper pressing of the fabric.

Heretofore the practice has been to introduce steam at one end of the bed and permit it to escape at the other end; but it has been found that this results in the graduated heating of the said bed, the heat being most intense at and near the end where the steam is introduced, and least at and near the opposite end.

In order to overcome this difficulty I introduce the steam to the interior of the bed at opposite ends of the same through pipes D D', and permit it to escape at or near the middle through a pipe, E.

The meeting of the two volumes of steam causes a recoil of both volumes before they can escape, and such a general admixture of the hotter with the cooler steam within the chamber of the bed takes place that the latter is maintained at a uniform heat throughout.

I claim as my invention—

The combination, in a pressing-machine, of the chambered bed A with pipes D D', one for conveying steam into one end, and the other for conveying steam into the other end, of the bed, and with a pipe, E, at or near the middle of the bed for the escape of the steam, all as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES BUTTERWORTH.

Witnesses:

ALEX. PATTERSON,  
HARRY SMITH.