J. A. HARRINGTON.
Folding-Hats.

No. 207,353. Patented Aug. 27, 1878.

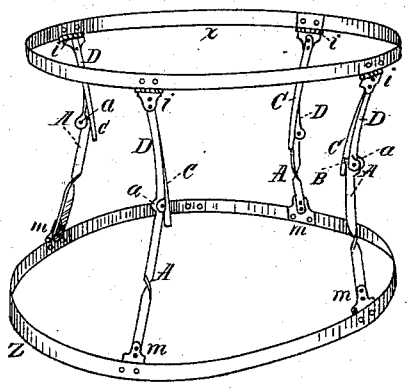

Fig. 1.

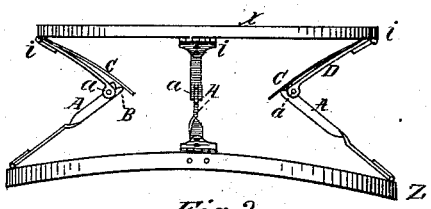

Fig. 2.

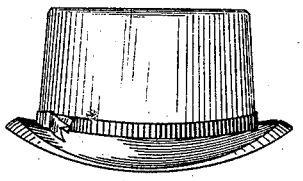

Fig. 3.

Fig. 4.

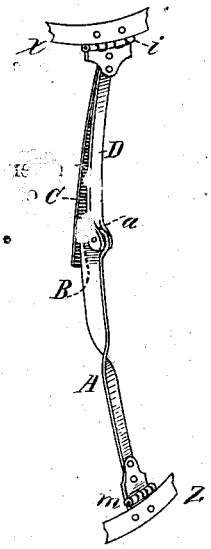

Fig. 5.

Witnesses:

Chas. Rollin Brainard

Clarence W. Hendrick

Inventor:

Jeremiah A. Harrington

# UNITED STATES PATENT OFFICE.

JEREMIAH A. HARRINGTON, OF MELROSE, MASSACHUSETTS.

## IMPROVEMENT IN FOLDING HATS.

Specification forming part of Letters Patent No. **207,353**, dated August 27, 1878; application filed January 28, 1878.

*To all whom it may concern:*

Be it known that I, JEREMIAH A. HARRINGTON, of Melrose, in the county of Middlesex and Commonwealth of Massachusetts, have invented a new and useful Improvement in Hats, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents the frame-work extended. Fig. 2 represents the frame-work partially folded. Fig. 3 represents the hat extended. Fig. 4 represents the hat folded, and Fig. 5 is a sectional view showing one of the joints of the frame-work.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of hats which are designed to fold up or crush when not in use, and are known to the trade by the various names of "French hat," "spring hat," "folding hat," "opera hat," &c.

It is well known that in nearly all hats of this description heretofore in use spiral springs are employed for expanding the same, and that the joints of the frame are unprovided with guards. It is also well known that spiral springs cause the hat to leap out or expand so suddenly when released as frequently to injure the material of which the hat is constructed, or break the frame-work.

My invention is designed to obviate these difficulties, and to that end I make use of the following means or instrumentalities:

In the drawing, *x* Z are flattened steel hoops or bands corresponding to the size of the hat to which the frame-work is to be applied. These hoops are connected by the arms A D, the arm A being jointed to the hoop Z at *m*, and the arm D being jointed to the hoop *x* at *i*, the arms D A being connected by a joint at *a*, as best shown in Fig. 5. The arm A is provided at its upper end with a stud or projection, B, and the arm D is provided with a flattened steel spring, C, on its outer side, the free end of which extends over the stud B and covers the joint *a*.

It will thus be seen that the arms A D and spring C form a joint similar in principle to the joint of an ordinary pocket-knife, the arm A representing the blade.

The object of elongating or extending the spring C over the stud or projection B is to form a guard or protector for the joint and to prevent the same from injuring the material of which the hat is composed.

The object of the stud or projection B is to provide a lever or means by which the spring C may be enabled to keep the arms A D more rigidly in position when the frame is extended.

In the use of my improvement the frame-work is inserted in the hat and covered with lining in the ordinary manner. When it is desired to crush the hat, pressure is applied to the top of the same, causing the spring C to yield and the joint *a* to bend inwardly, as seen in Fig. 2, until the hat assumes the position seen in Fig. 4. When it is desired to open or extend the hat it is taken by the rim and with a sudden movement in the usual manner the hoop *x* and top of the hat are thrown out, causing the frame-work to assume nearly the position shown in Fig. 1, and the hat the position shown in Fig. 3.

Having thus described my invention, what I claim is—

The improved expansible hat-frame described, consisting of the hoops *x* Z, jointed arms A D, and spring C, constructed and arranged to operate substantially as and for the purpose described.

JEREMIAH A. HARRINGTON.

Witnesses:

F. S. HARRIS,

CHAS. R. BRAINARD.