

(No Model.)

A. C. COUCH.

FLEXIBLE MIRROR FOR HAT TIPS AND OTHER PURPOSES.

No. 291,033.

Patented Jan. 1, 1884.

Fig 1

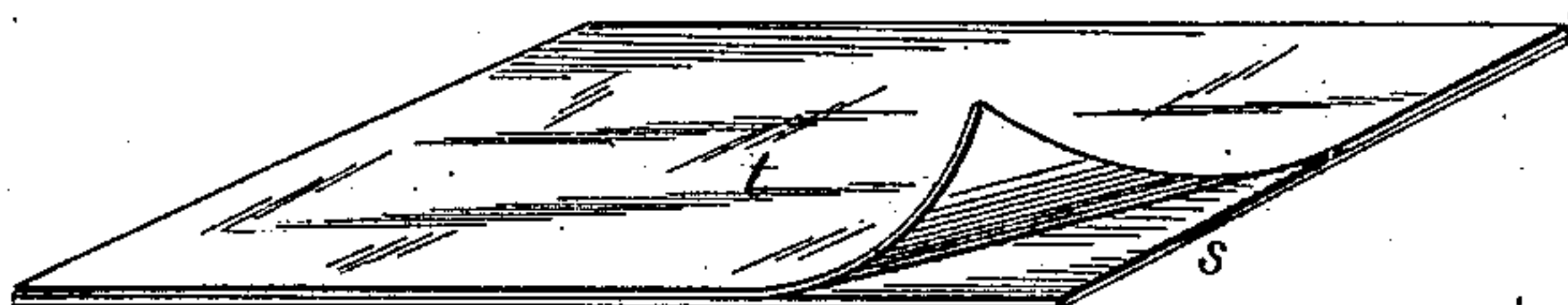


Fig 2

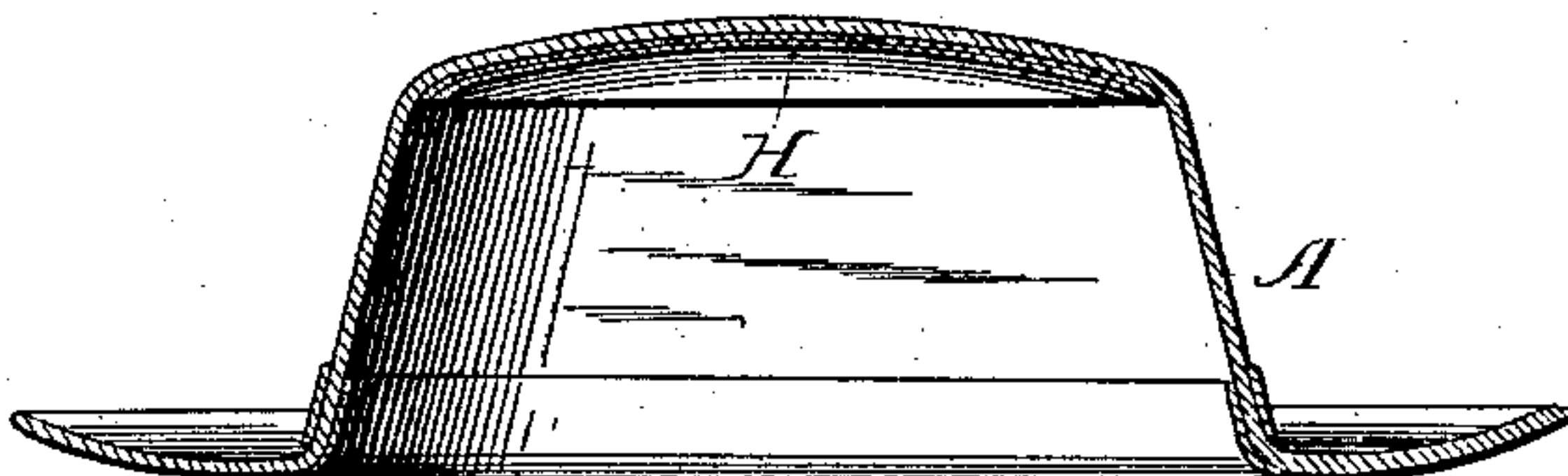
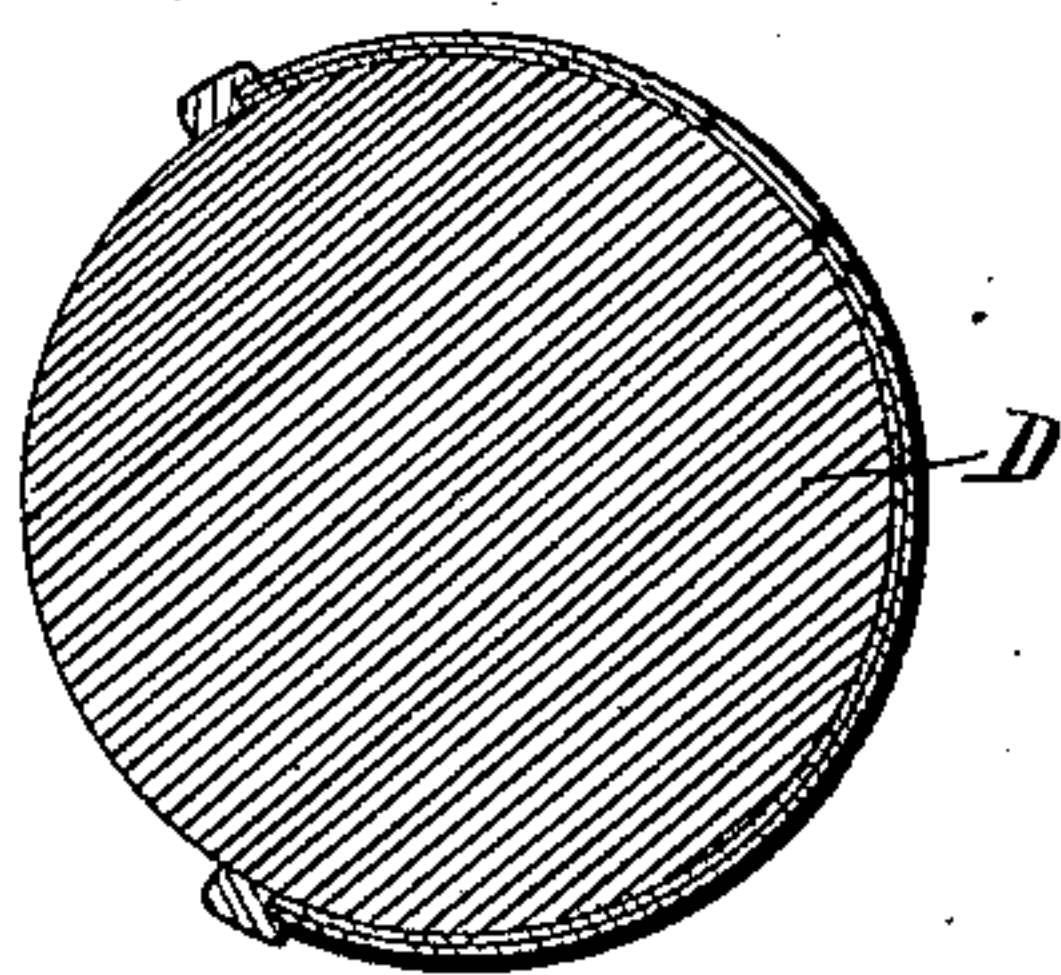


Fig 3



Witnesses:

John Hinkel  
J. Campbell

Inventor:

A. C. Couch  
by Foster & Sherman  
attys

# UNITED STATES PATENT OFFICE.

ALBERT CHARLES COUCH, OF BOSTON, MASSACHUSETTS.

## FLEXIBLE MIRROR FOR HAT-TIPS AND OTHER PURPOSES.

SPECIFICATION forming part of Letters Patent No. 291,033, dated January 1, 1884.

Application filed November 22, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT C. COUCH, a citizen of the United States, and a resident of Boston, Suffolk county, Massachusetts, have  
5 invented certain new and useful Improvements in Flexible Mirrors for Hat-Tips and other Purposes, of which the following is a specification.

My invention has for its object to provide a flexible reflecting-sheet suitable for many or-  
10 namental and useful purposes, and especially adapted for hat-tips.

In the drawings, Figure 1 is a view illustrating the manufacture of my invention. Fig. 2  
15 is a view showing my improved reflecting-sheet as applied to the tip of a hat. Fig. 3 is a section illustrating the application of the reflector to curved objects.

To carry out my invention, I first prepare a sheet, *s*, of transparent gelatine, of any desired  
20 thickness, and to one side of the sheet I apply a sheet, *t*, of polished tinfoil, gold or silver foil, or a silvering composition or solution, or a coating of asphalt, or other substance which  
25 will afford or impart a reflecting-surface. When the material is to be used in situations where it is liable to be subjected to the action of moisture, I bichromatize the gelatine, or by the use  
30 of alum or other substance render it more or less insoluble. The reflecting flexible sheets thus formed are adapted for many purposes. For instance, they may be cut into suitably-  
shaped pieces, *H*, and inserted in the crowns of hats or caps *A*, as a substitute for the ordinary tips, as shown in Fig. 2; or they may be  
35 bent round curved surfaces, as round posts *D*,

Fig. 3, thereby securing a cheap and effective curved mirror. They may be cut into sheets and used as substitutes for glass mirrors in toys, thus securing a very cheap and very dura-  
40 ble reflector, and they may be effectively employed in applique or other ornamental work where rigid glass or metal reflectors could not be used.

I am aware of the use of silvered mica as a substitute for ordinary glass mirrors, for which  
45 purpose it is sometimes effective; but as it consists of laminae, which will occasionally flake off, it will not answer many purposes to which the continuous flexible silvered gelatine sheets may be applied.  
50

I claim—

1. A flexible reflector consisting of a sheet of gelatine, with one face silvered or coated to afford a reflecting-surface, substantially as set forth.  
55

2. A reflector consisting of a flexible sheet of insoluble gelatine having one face silvered or coated, substantially as specified.

3. A hat-tip composed of a sheet of flexible gelatine silvered or coated on one side to af-  
60 ford a reflecting-surface, substantially as set forth.

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

ALBERT CHARLES COUCH.

Witnesses:

H. H. HAYDEN,  
HAL BELL.