

(No Model.)

A. S. HELD & D. C. STOVER.  
SASH PULLEY.

No. 432,406.

Patented July 15, 1890.

Fig. 1.

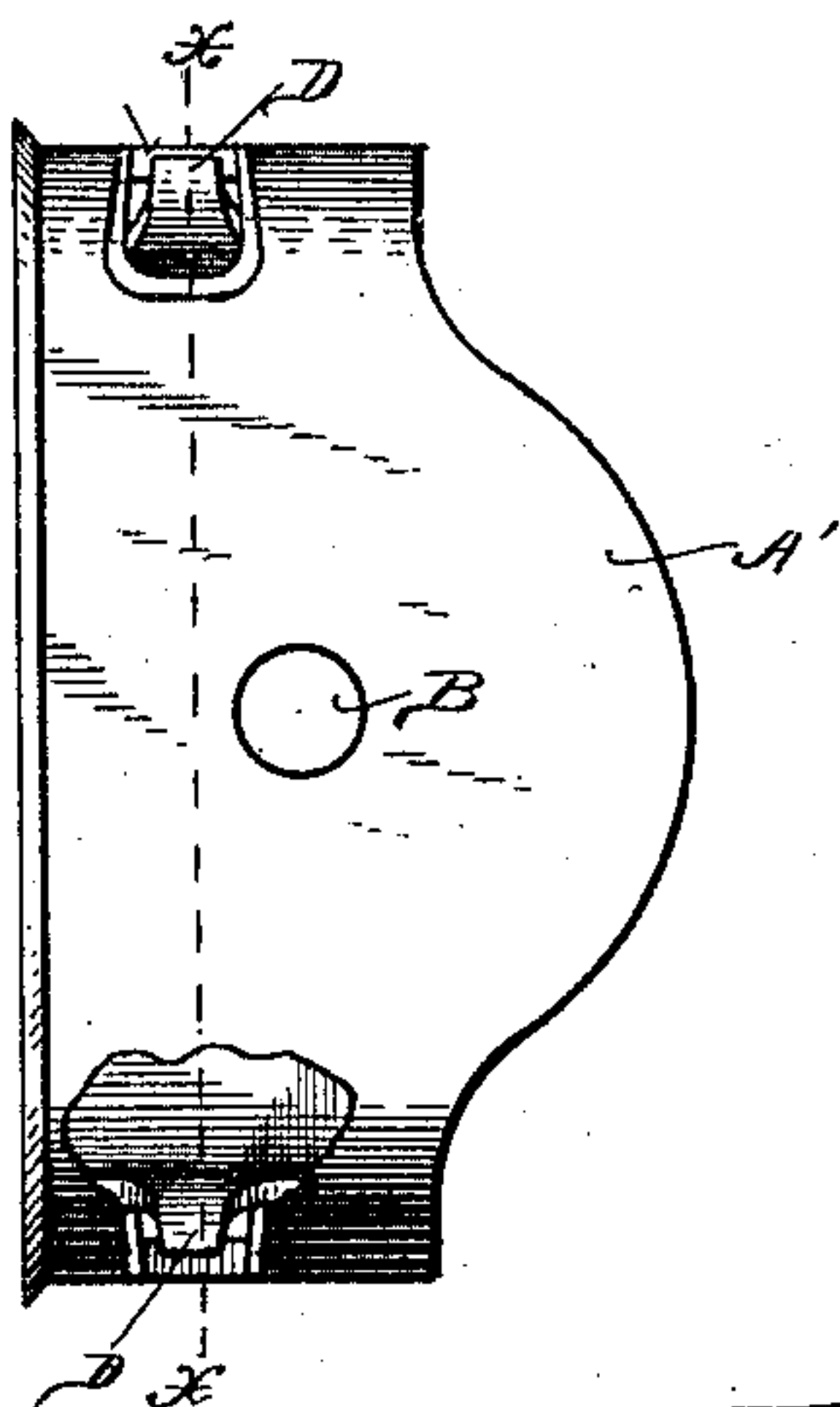


Fig. 2.

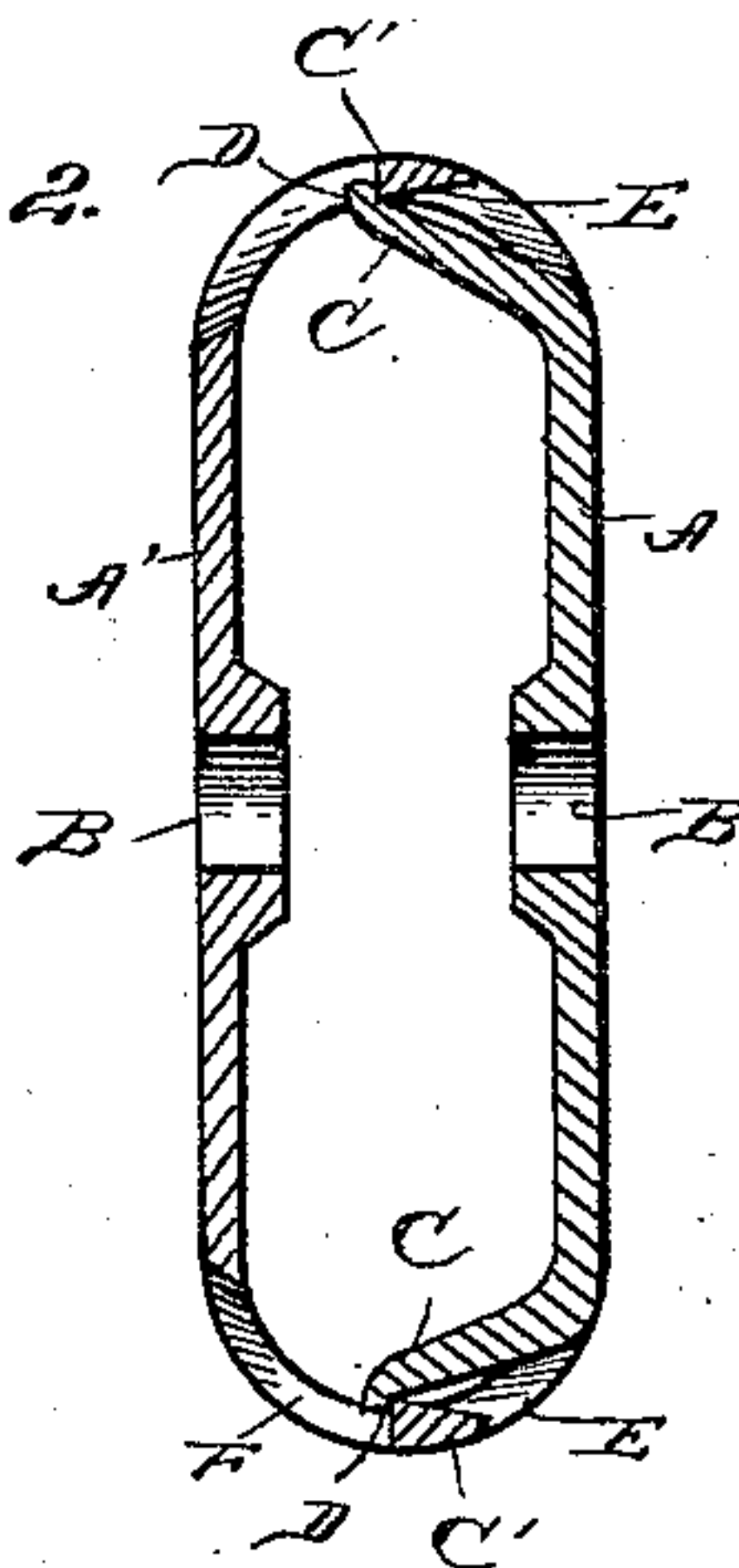


Fig. 3.

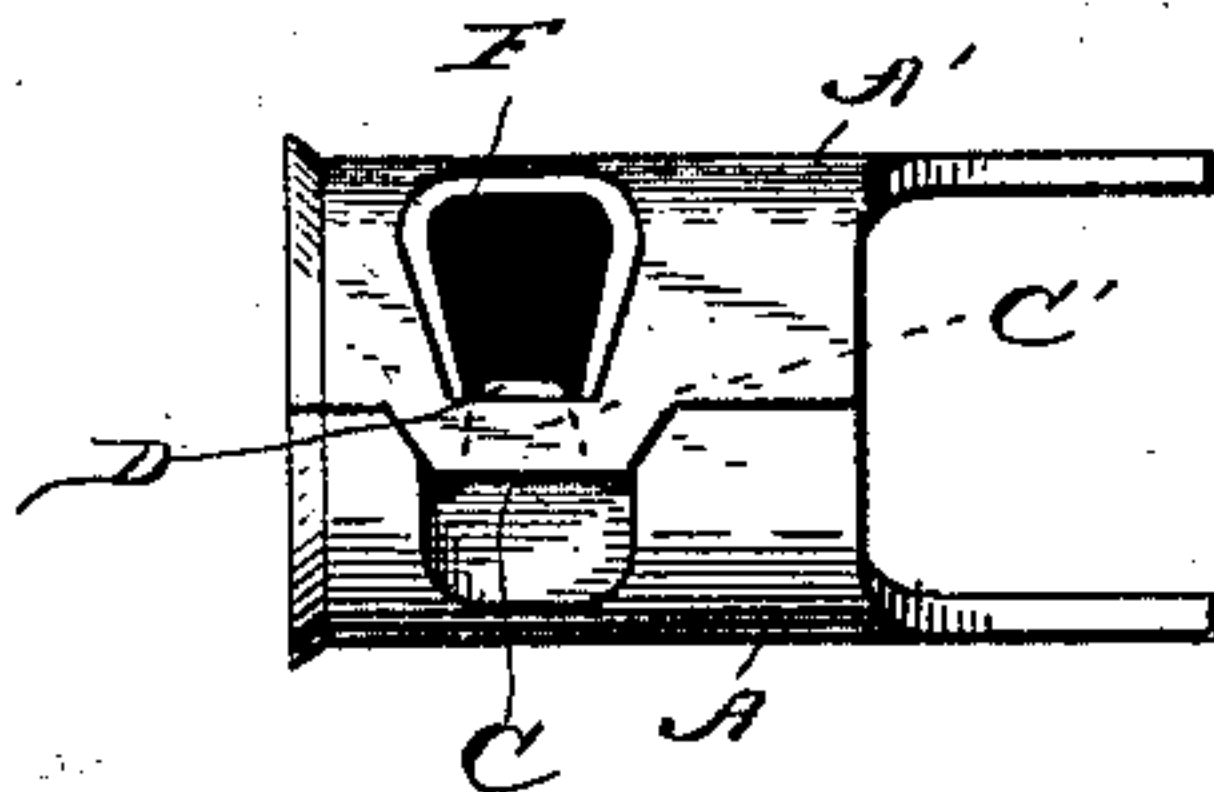


Fig. 4.

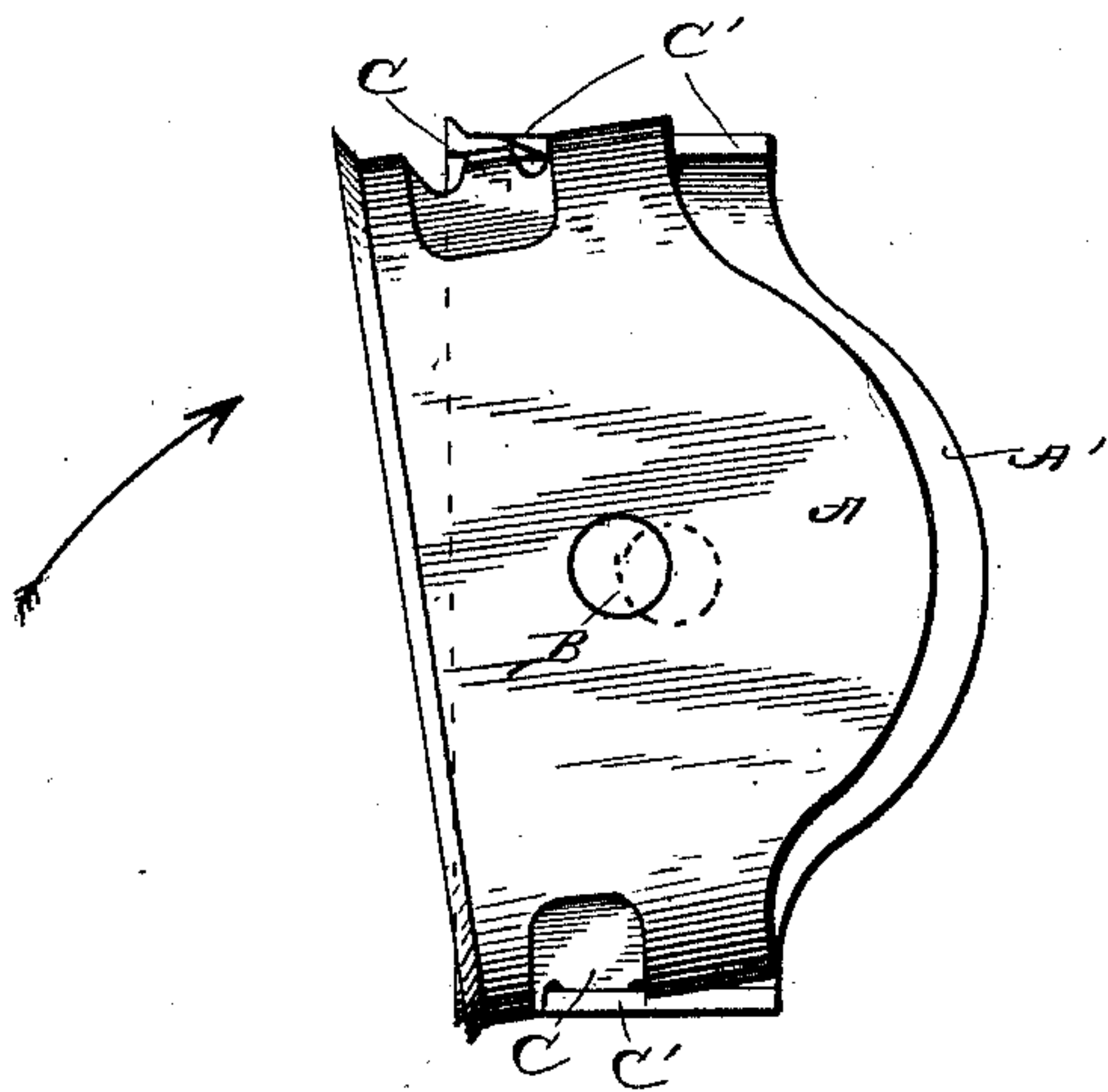
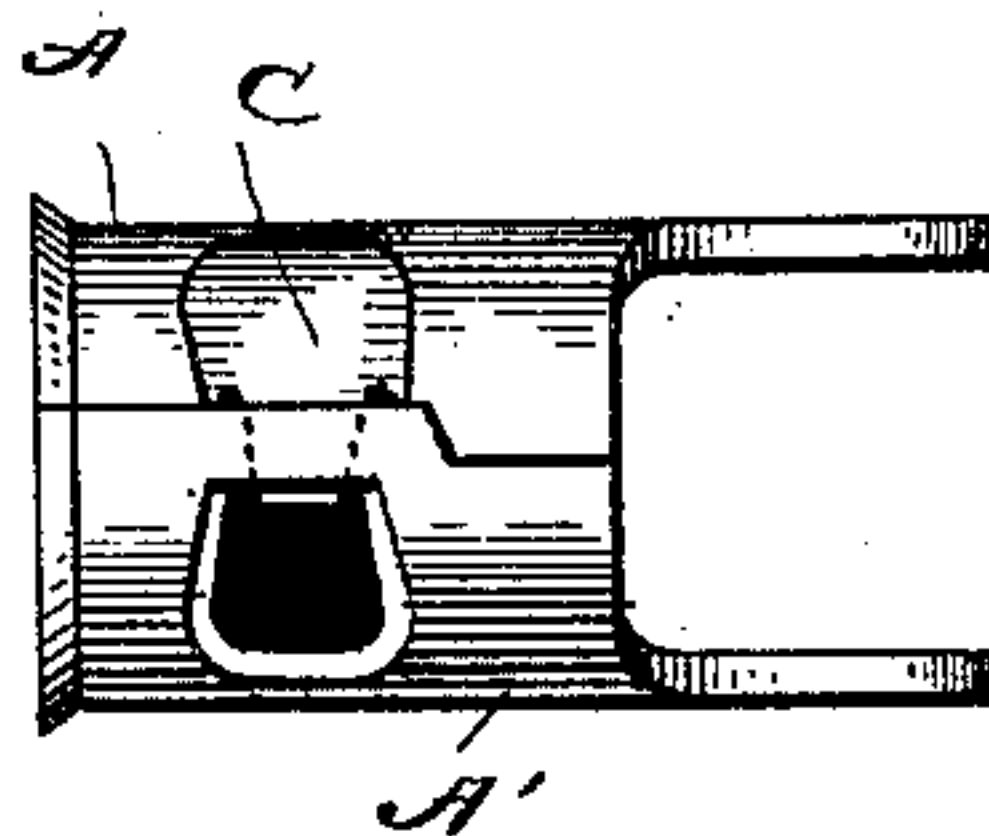


Fig. 5.



Witnesses:

Harry S. Rohrer.  
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# UNITED STATES PATENT OFFICE.

AUGUST S. HELD AND DANIEL C. STOVER, OF FREEPORT, ILLINOIS, ASSIGN-  
ORS TO THE STOVER MANUFACTURING COMPANY, OF SAME PLACE.

## SASH-PULLEY.

SPECIFICATION forming part of Letters Patent No. 432,406, dated July 15, 1890.

Application filed August 9, 1889. Serial No. 320,270. (No model.)

*To all whom it may concern:*

Be it known that we, AUGUST S. HELD and DANIEL C. STOVER, of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Sash-Pulleys; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The object of this invention is to provide a more satisfactory pulley-case of the class in which parts are united to form a complete case ready for use. In such cases the parts have been secured together by an additional piece—as, for example, a screw—or the parts have been made to clasp in such manner as to give frictional engagement. The first of these methods is expensive and the second is insecure, and both involve constructions not in our judgment desirable. We so form the parts that they are sprung as the parts are forced into normal relative position and are then interlocked by projections upon one of the parts being thrown into corresponding recesses in the other part by the recoil of the metal when such position is reached. This engagement may be termed positive whatever the form of the projections, since in any case were friction annihilated the parts would still be securely interlocked, forcible springing of the parts necessarily preceding separation. This means for locking the parts of a pulley-case is believed to be entirely new and more satisfactory than the means heretofore employed for the same end.

In the accompanying drawings, Figure 1 is a side view of the case, a small part being broken away to show construction. Fig. 2 is a section on the line *xx*, Fig. 1. Fig. 3 shows the edge of the case. Figs. 4 and 5 are respectively a side and an edge view of a slightly-modified construction.

In the drawings, *A A'* are the halves of the case, and *BB* are registering apertures therein to serve as bearings for the gudgeons of the usual cord-carrying wheels, to which the general plane of division between the halves is parallel.

In Figs. 1, 2, and 3, the half *A* is overlapped at *C C* by the corresponding parts *C' C'* of the

half *A'*, and these overlapped parts at each edge of the case are provided with slight projections *DD*, that as the two halves are pressed together pass along an inclined surface *E* upon the overlapping part *C'* until they reach recesses *F*, into which they may pass. The extreme outer limits of the projections are slightly more distant from each other than the inner limits of the parts *C' C'*, and hence as the projections are forced along the inclined surfaces the halves are sprung, and just as they come into normal relative position the recoil forces the projections into the recesses and the halves are securely united. When the halves are of cast metal, the recesses, as shown, extend entirely through the case-walls to avoid the necessity for coring; but this is not an essential feature. It is to be observed that when the construction is as thus far set forth the direction of motion when the halves are pressed together is substantially parallel to the wheel's axis, and that therefore the wheel and its axis may be in one piece, to be placed between the halves they are brought together; or, in other words, no more than three pieces need be used to form a complete pulley.

It is evident that it is immaterial whether the projections be upon the overlapped or upon the overlapping parts, and also that less springing is required if one of the projections be first placed in its recess and the halves swing upon this projection as a pivot in bringing the other into position. It follows that the inclined surface may be dispensed with at one edge of the case, and, indeed, if they be omitted at both edges the only loss is in the convenient springing of the pieces to precisely the proper degree.

Figs. 4 and 5 show a form adapted for pulleys having a gudgeon separable from the wheel itself. In this case the halves are provided with overlapping parts analogous to those already described, but they are united, as indicated in the drawings, by rotating one-half with reference to the other in its own plane, or transversely to the gudgeon. Either form permits the use of one or more pulleys in the same case.

What we claim is—

1. A pulley-case composed of two pieces,

100



one having at its opposite sides catch-like recesses, the other having at corresponding points projecting parts, themselves provided with lateral projections adapted to be sprung  
5 out of place by impingement upon the opposite piece as the pieces are forced into normal relative position and to be thrown in a contrary direction into said recesses, by the recoil of the metal when such position is reached.  
10 2. The pulley-case composed of halves, one having the catch-like recesses in its opposite inwardly-curved sides and the inclines leading to said recesses, and the other having upon its corresponding sides lateral projec-

tions adapted to be sprung out of place in 15  
passing along said inclines and to be thrown in a contrary direction into said recesses by the recoil of the metal when the recesses are reached, whereby the halves are positively  
interlocked. 20

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

AUGUST S. HELD.  
DANIEL C. STOVER.

Witnesses:

H. C. HYDE,  
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