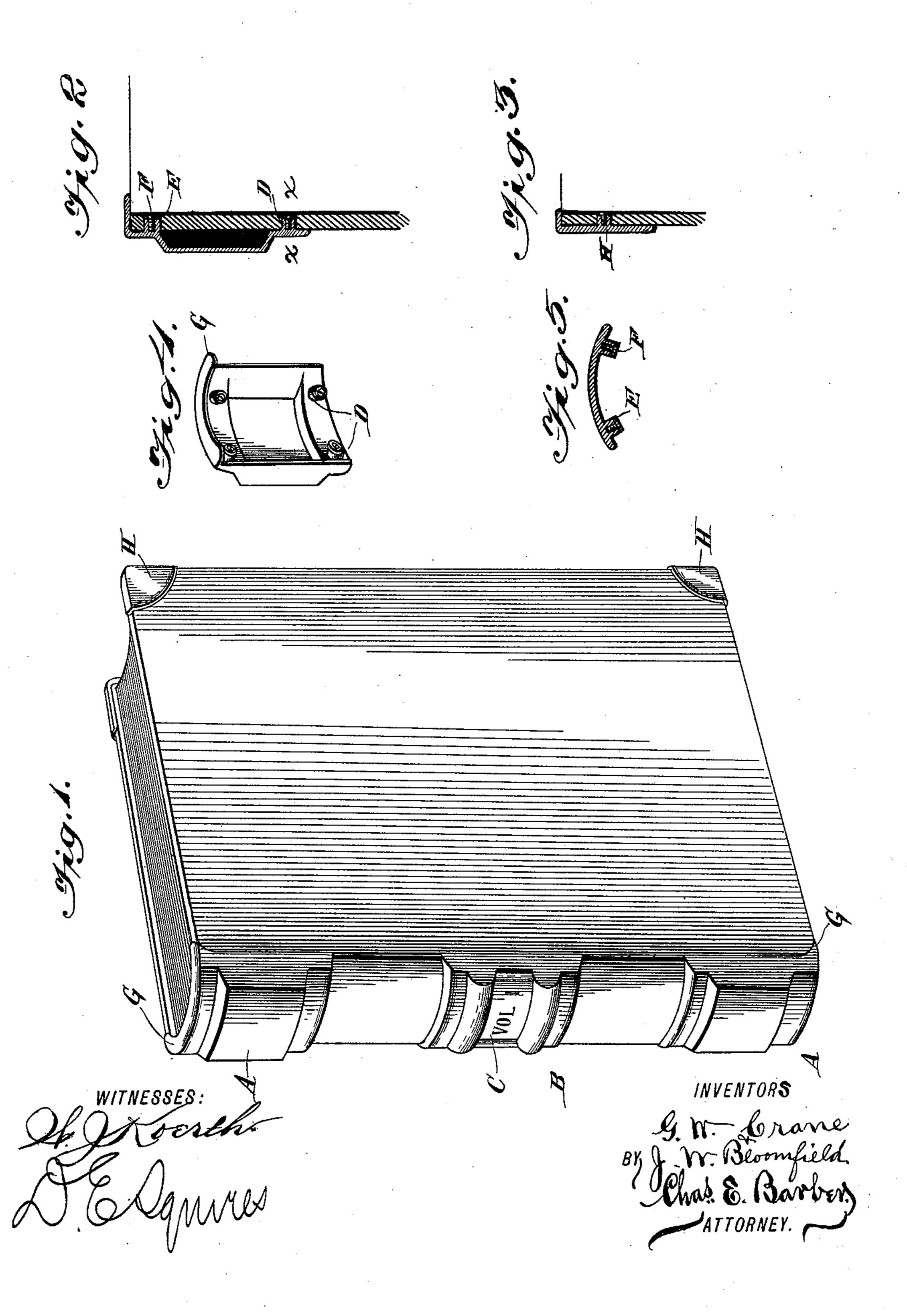
G. W. CRANE & J. W. BLOOMFIELD.

BOOK BACK PROTECTOR.

No. 587,389.

Patented Aug. 3, 1897.



## United States Patent Office.

GEORGE W. CRANE AND JOHN W. BLOOMFIELD, OF TOPEKA, KANSAS, ASSIGNORS TO CRANE & CO., OF SAME PLACE.

## BOOK-BACK PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 587,389, dated August 3, 1897.

Application filed October 26, 1896. Serial No. 610,128. (No model.)

To all whom it may concern:

Be it known that we, George W. Crane and John W. Bloomfield, citizens of the United States, residing at Topeka, county of Shawnee, and State of Kansas, have invented certain new and useful Improvements in Book-Back Protectors, of which the following is so full, clear, and exact a description as will enable those skilled in the art to which our invention appertains to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a book provided with the improved back-protector or hub and corner-protectors. Fig. 2 is a section of one of the hubs or back-protectors. Fig. 3 is a section of the corner-protector. Fig. 4 is a perspective view of a hub made in accordance with our invention. Fig. 5 is a protectors.

The object of the invention is to provide a protector or hub for books, preferably for blank-books; and the invention consists particularly in the form of the hub, the material of which it is made, and in the particular means of attaching the hub to the book.

In the accompanying drawings, A designates the two end protectors or the two end 30 hubs.

B designates a central protector or central hub, and is provided with a gap C, through which may be shown the number of the volume or the title of the book.

D designates bosses cast integral with the hubs on the inside.

E designates a washer, and F a screw adapted to screw into the boss from the inside of the back of book.

The end hubs A A have a lip G, which projects over the end at top and bottom, as shown in Fig. 1.

H H designate corner-protectors, which are provided with a boss and a washer and screw for securing them to the book from the inside in substantially the same manner as the hubs proper are secured to the book-back.

The material used in this back-protector is preferably metal and may be made of alu-

minium, brass, steel, tin, or any other metal, 50 or it may be made of any other suitable hard inflexible metal.

The invention is really an improvement on our book-back protector as shown in Patent No. 497,441, dated May 16, 1893. Of course 55 the fastening device shown in this instance may be used with equal facility on flexible corners for hubs as well as inflexible ones. We therefore do not wish to limit ourselves to metallic protectors, but wish to reserve the right 60 to use any material which may be found desirable in connection with this particular type of improved fastening devices; nor do we wish to confine ourselves to this particular mode of fastening them to books with screws from the 65 inside.

Having thus fully described our invention, what we believe to be new and of our invention, and what we therefore claim and desire to secure by Letters Patent, is—

1. A book-back protector consisting of a hub adapted to be secured to the back of an ordinary book, preferably a blank-book, the same consisting of a main body provided with bosses formed on the inside; in combination 75 with means for securing them to the bookback, as set forth.

2. A book-back protector, consisting of a hub, the same consisting of a main body provided with bosses formed on the inside; in 80 combination with screws and washers, as set forth.

3. A corner-protector consisting of a plate having a boss formed on the inside; in combination with a screw for holding it in a book- 85 cover, substantially as described.

4. A corner-protector consisting of a plate having a boss formed on the inside; in combination with a washer and means for securing the washer on the boss to hold the plate 90 to the book, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

GEORGE W. CRANE.
JOHN W. BLOOMFIELD.

Witnesses:

E. F. MITCHELL, J. A. RAMSEY.