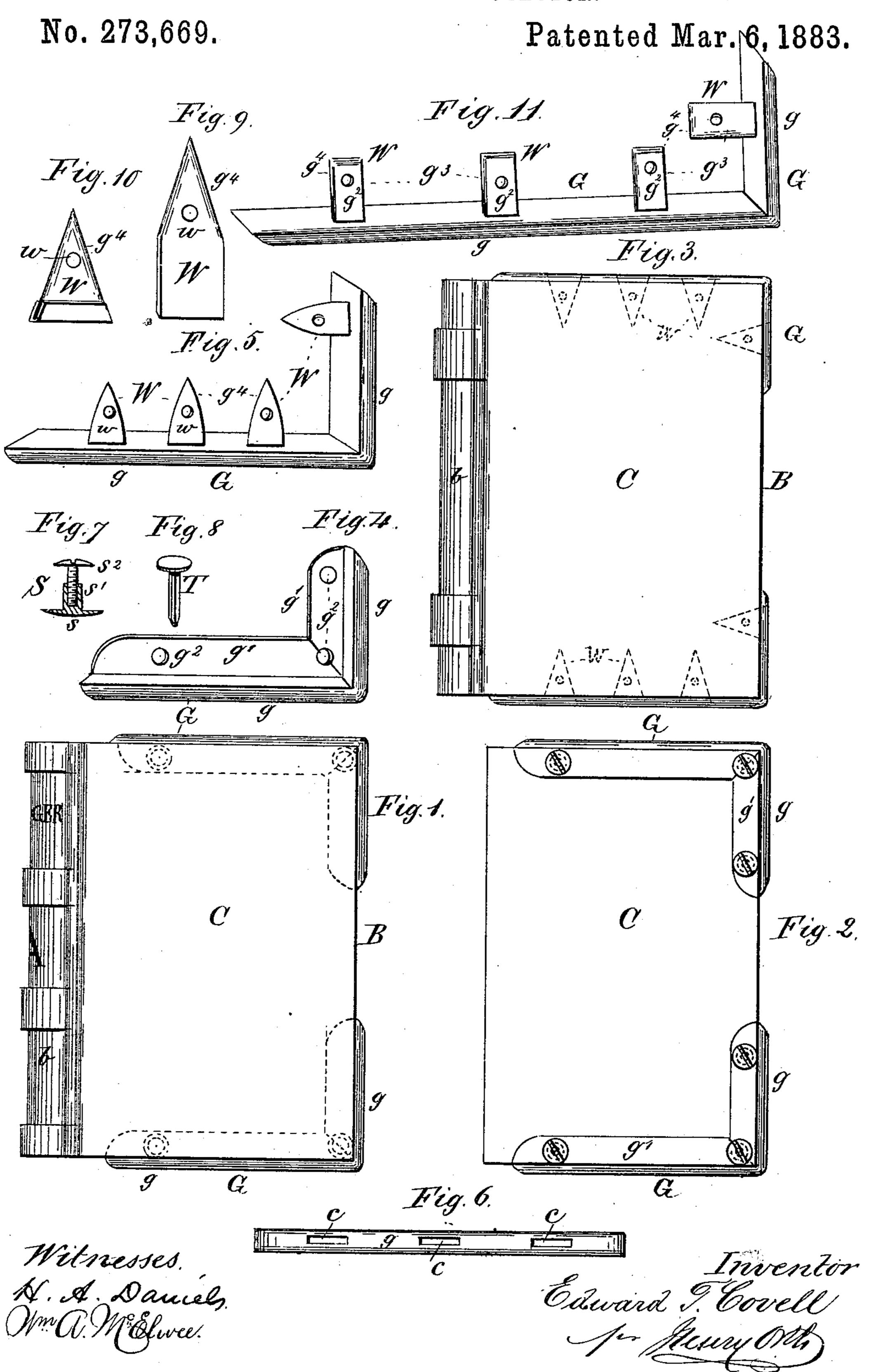
E. T. COVELL.

BOOK COVER PROTECTOR.



## United States Patent Office.

EDWARD T. COVELL, OF NEW BEDFORD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO EDWIN DEWS, OF SAME PLACE.

## BOOK-COVER PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 273,669, dated March 6, 1883.

Application filed April 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD T. COVELL, a citizen of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Book-Cover Protectors; and I 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The object of my invention is to protect the edges and corners of books of all descriptions, but more especially to that class of books which by their own weight are liable to crush the edges of their covers or the edges of the backs

20 when placed on shelves.

It is well known that heavy books, when handled in taking them from or placing them on the shelves or in safes, are in the former case dragged along said shelves, and in the latter case placed thereon with more or less force, and it is also well known that this handling wears the edges of the covers and their corners very rapidly, and the want of some simple and durable device to obviate this injury to books has long been felt.

Books have for centuries, I might say, been provided with metallic protectors upon their corner. These, however, prove injurious, not to their own cover-corners, but to the covers 35 of other books placed alongside of them, as well as to the furniture or shelves upon which such books are laid for use or upon which they stand. This is due to the fact that all such metallic corner-protectors have two 40 flanges—one on the inside and one on the outside of the cover. These protectors are attached to the covers after the book is bound, and the metal used, being very thin, leaves sharp edges all along the outside flange, that 45 act in a measure like a plane-iron, and shave the covers of books alongside of them when drawn from or returned to the shelves, or shave

the table, desk, or other piece of furniture

upon which such book may be placed. The

50 metal employed, being, as aforesaid, very thin,

does not afford protection to the backs of books. These guards present another inconvenience, in that they have to be made specially for each book, so to say, if a neat fit is desired, as it is very seldom the case that in 55 the making up a lot of books all of them have the same thickness of cover. This is due not only to the varying thickness of the board employed, but also to the varying amount of pressure such books are subjected to in their mak- 60 ing up, as will be readily understood by those acquainted with this branch of the arts. To afford the necessary protection to books against the wear of the edges of the covers and the corners of the latter, it is therefore essential 65 that no sharp edges should be presented by the devices employed, either upon the outside of the cover or upon its edges, and that the book should be raised sufficiently from the shelf or other support upon which it is stood 70 on edge to prevent the back of the book coming in contact therewith.

Various constructions of devices may be employed to effect the desired ends, as hereinafter more fully described, and as shown in the accompanying drawings, in which—

Figure 1 is an elevation of a book provided with my improved back, cover edge and corner protector. Fig. 2 is an inside view of the book-cover, illustrating one method of attach-80 ing the protector. Fig. 3 is an elevation of a book, showing a modified construction of protector and mode of attaching the same. Figs. 4 and 5 are perspective views of the protector shown in Figs. 1 and 3. Fig. 6 is a face view 85 of the devices represented in Fig. 5. Figs. 7, 8, 9, and 10 show fastening devices whereby the protectors are attached to the book-covers, and Fig. 11 is a perspective view of still another modification of construction of protector. 90

Like letters of reference are employed to indicate like parts wherever such may occur in the above-described figures of drawings.

C represents one of the leaves of the cover

As stated above, to effectually guard the back of the book, as well as the edges and corners of the cover, against wear and abrasion, and also to effectually prevent the abrasion of the covers of books placed in contact with one

another, and the abrasion of the shelves, desks, 1 tables, or other furniture upon which such books may stand or lie, it is necessary, first, that the edges of the book-covers should be 5 raised sufficiently above their support to prevent the back from coming into contact therewith, and, secondly, that there should be no sharp surface or angles exposed to the contact of such other books, or the furniture upon 10 which they may stand or lie, that would produce abrasions upon the same. The first result I obtain by using a rectangular metallic guard or protector, G, of the desired thickness, extending from a point upon the front 15 edge of the cover, above its corner, around the latter to the back b of the book, or to a point sufficiently close to the said back to afford a proper bearing for the book and prevent its tilting upon the guard. The construction of 20 these guards G, as well as the means employed to attach them to the book-covers, may vary infinitely, and must necessarily vary with the

thickness and strength of the covers. In Figs. 1 and 2 and 4, I have illustrated one 25 construction of protector or guard G and method of attaching the same to book-covers which I have found to answer admirably for very large books, such as bank or mercantile ledgers and analogous heavy books. It consists 30 of a comparatively thick rectangular bar of any suitable metal, either semi-cylindrical in cross-section or having its faces g, as well as the corner, rounded and polished, and its ends beveled off, as shown. It is of a width equal to 35 or preferably equal to the thickness of the cover C, and from one of its edges extends a flange of thin sheet metal, g', provided with a number of holes,  $g^2$ . This flange, when the bar is attached to the cover, lies upon the inside of the latter; 40 hence the guards are right and left hand guards for the corresponding leaves of the cover. In

split, so as to admit of the bar being slightly bent inward or outward to fit the covers ex-45 actly, as these are not always perfectly square. These guards G may be attached to books already in use by simply punching holes through the covers and attaching the guards in any convenient or desired manner, either by means 50 of ordinary tags, T, Fig. 8, or by means of rivets or eyelets, or by means of the screw-buttons S, Fig. 7, consisting of a headed shoe, s, having a hollow interiorly-screw-threaded stem, s', and a headed and threaded shank, s2. 55 I prefer, for the class of books described, to em-

this construction the flange at the corner is

tice the guard is attached before the leather or outer finishing-sheet as well as the inner finishing-sheet of the cover is applied. The 60 holes in the cover are punched and countersunk to receive the head of the shoe s, which head, when the shoe is inserted, lies flush with the outer face of the cover, and is hidden from

ploy the latter fastening devices, and in prac-

view by the leather, cloth, or paper finishing-65 sheet of such cover. Upon the inside of the cover the punched holes are also countersunk I be protected; yet the upper edges and corners

to receive the nicked head of the shank  $s^2$ , which is screwed into the stem of the shoe of the button, and is also covered from view by the inside finishing-sheet of the cover. In this 70 manner I obtain a secure attachment for the guard, and the latter presents no surface or sharp edges which can possibly injure either other books or the furniture upon which the book may be laid or upon which it may stand. 75

For smaller books, or books of less weight and thickness of cover, I preferably employ a flattened rectangular bar, G, as shown in Figs. 3, 5, 6, and 11, having, however, its longitudinal and vertical edges rounded off and its ends 85 beveled, and, as shown, I preferably use a bar devoid of a flange, either flat or semi-cylindrical in cross-section. This bar may be attached to the cover in various ways. It may be provided with thin projecting fastening-plates  $g^3$ , 85 provided with holes  $g^2$ , said plates having preferably knife-edges  $g^4$ , to facilitate driving or forcing them into the covers of the books and when in proper position driving a tack or paperfastener or other suitable fastener through the 90 cover and plates  $g^3$ , as shown in Fig. 11; or the bar may be provided with slots c, and said bar may be attached to the edges of the covers by driving spear-head-shaped or triangular wedges W, Figs. 3, 5, 9, and 10, into the covers. 95

As shown, the body of the wedge W is very thin, so as not to materially increase the thickness of the covers and form a swelling or bulge at the point where it is driven into said cover, while the head of the wedge, or that por- 100 tion thereof which lies in the slot of the bar, is of tapering form and of increased thickness, so that when said wedges are driven in flush with the faces of the bar their heads will be securely wedged in the slots. The edges  $g^4$  of 105 the body of the wedge are also ground down. to form knife-edges to facilitate their insertion into the cover C, and instead of the triangular wedges the rectilinear wedge, Fig. 11, may be employed. No other fastening is required, 110 since the bar is secured both at its short and long arm, the wedges of the former lying at right angles to the wedges of the latter within the thickness of the cover. By the frequent handling of the books these wedges might, how-115 ever, work loose in the cover, and the weight of the longer side of the bar might finally draw them partially out of said cover. To avoid this I form a hole, w, in the end wedges of the long and short arm of the bar, or in all the 120 wedges, through which and part of the cover a tack may be driven from the inside of said cover.

Whenever the thickness of the cover permits the use of the screw-button S, I prefer to 125 use it, as I have found it to be the most convenient and most secure fastening device.

Of course it will be understood that it is necessary only that the lower edges and corners of the covers of a book, or those edges 130 and corners upon which the book stands, need

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may be provided with guards also, if desired, to make the appearance of the book more symmetrical.

The application of the guards G to opposite edges and corners of the two leaves of the cover will in costly bindings be an additional ornament, and for this purpose said guards may be plated with silver, gold, or nickel.

When the guards are applied to one edge and corner of the leaves of the cover they also serve as a means whereby the standing of the book upside down upon a shelf is or may be avoided.

If desired, the flanged guard G shown in Figs. 1, 2, and 4 may also be provided with slots, and the fastener W may then be employed, in conjunction with the flange, to secure the bar to the cover-leaves.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. Metallic guards for book-covers, comprising a rectangular protecting-frame, with in-

wardly-projecting fastening devices on both sides of said frame, and at a suitable distance 25 from the outer edge thereof, substantially as described.

2. The rectangular bar G, having a flange, g', provided with holes  $g^2$ , in combination with the screw-button S, substantially as and for 30 the purpose specified.

3. The combination, with the covers of a book, of guards, each having a flange along one of their edges, adapted, when the guard is applied to the right and left hand covers, to lie 35 on the inside thereof, and means, substantially such as described, whereby said guards are attached to the covers and leave no projecting points or surfaces upon the outside thereof, as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD T. COVELL.

Witnesses:

SOUTHWARD POTTER, 2d, EDWIN DEWS.