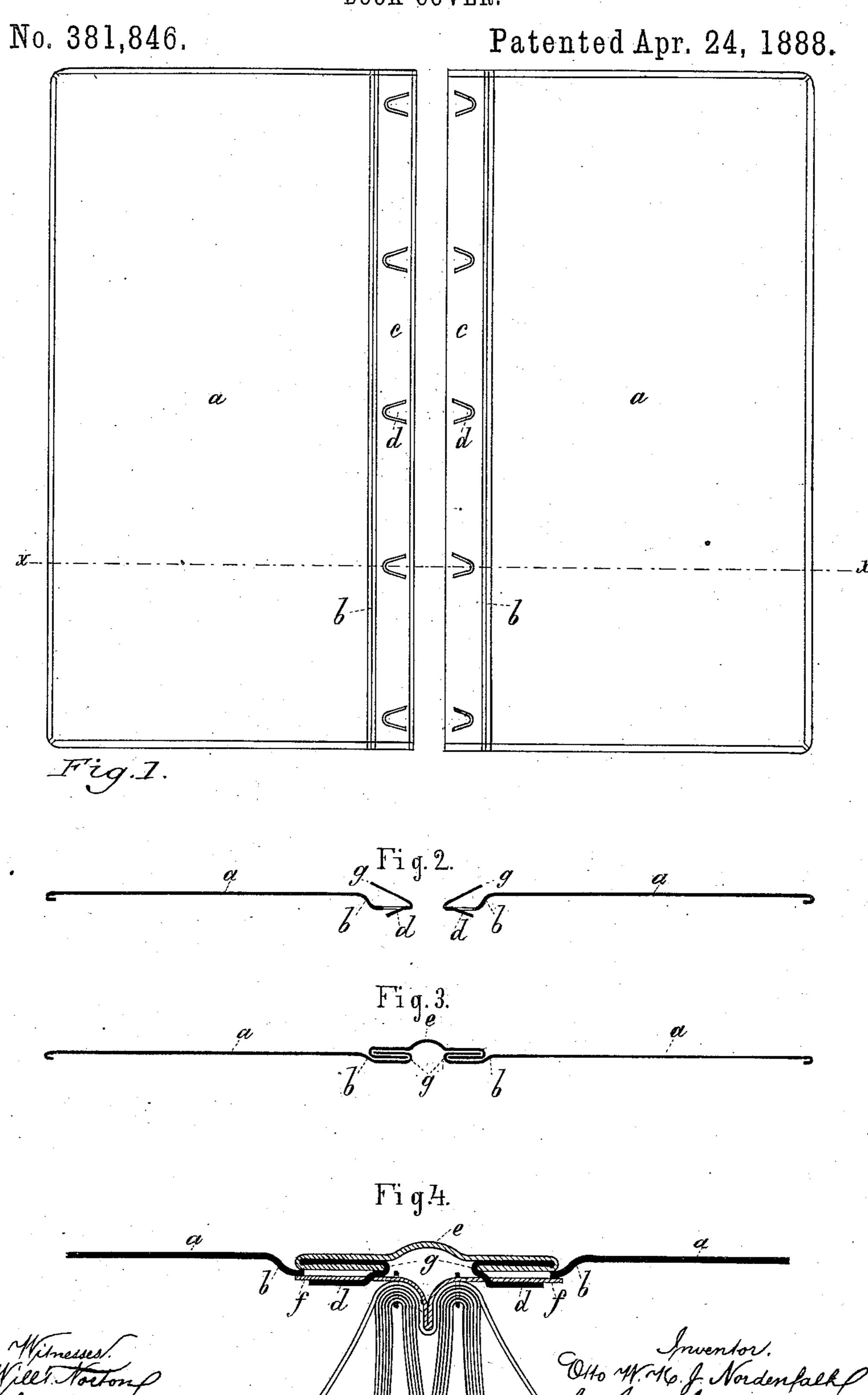
## OTTO WILHELM KLAS-JOHAN NORDENFALK. BOOK COVER.



## United States Patent Office.

OTTO WILHELM KLAS-JOHAN NORDENFALK, OF LINKÖPING, SWEDEN.

## BOOK-COVER.

SPECIFICATION forming part of Letters Patent No. 381,846, dated April 24, 1888.

Application filed April 8, 1887. Serial No. 234,165. (Model.)

To all whom it may concern:

Be it known that I, Otto Wilhelm Klas-Johan Nordenfalk, a subject of the King of Sweden, and a resident of Linköping, Province of Oestergötland, Sweden, have invented Book-Covers of Metal Sheets, of which the following is a specification.

The object of this invention is to afford a metallic book-cover of special construction and

to of great strength and durability.

Instead of using materials of which covers now in use are made, I substitute therefor metal sheets. Each half of the cover consists of a plate which may be ornamented in a variety of manners, as by nickeling, engraving, pressing, lithographing, japanning, and the like, and the cover may be made of a thinner or a thicker plate, according as it is desired to have it more or less rigid or more or less flexible, or to be made lighter or heavier, as may be required for the kind of book to which it may be applied.

On the annexed drawings, Figure 1 represents the inner side of such a plate cover. Fig. 25 2 is a section after the line x x, Fig. 1. Fig. 3 shows the two halves of a cover connected to a back and viewed from the upper edge, and Fig. 4 is a cross-section of an open book bound

in such a cover. o In employing the said covers in bookbinding the mode of operation is as follows: The plates a, cut to a suitable size, are folded inward on three of their edges, and on the fourth edge, which should be one of the 35 long sides, they are provided with a longitudinal fold, b, at a short distance from the edge, by which the part c of the plate next to this edge will be situated in another plane than the other surface of the plate. Then either 40 a number of rivet - holes, or a number of prongs or catches, d, are cut out in this part of the plate, whereafter the part of the plate being behind these holes or prongs is folded so that a fold, g, is formed on the outer side of 45 the plate. Two plates prepared in this manner are then joined by an outer back, e, consisting of a strip of cloth, skin, parchment, or other flexible material, the long sides of which are inserted in the fold of each plate, which 50 fold is then pressed together so as to pinch the outer back. Then the back of the book to be bound is provided with an inner back consisting of a strip of cloth, skin, or other flexible material, the long sides of which project a little out of the back of the book. These 55 long sides now are passed upon the prongs d, which are then pressed down again, whereby the book is retained to the cover by its inner back.

If the cover be provided with rivet-holes instead of prongs, the inner back is secured to
the cover by means of rivets or plate-strips
or wire traversing the rivet-holes and the inner back. Finally, in order to effect a still
stronger connection between the cover and 65
both backs, those parts of the latter which
come in direct contact with the cover itself
may be covered with some paste or binding
agent. On the other side prongs as well as
rivet-holes may be dispensed with, and the back
may be simply united with the cover by some
suitable binding agent, although the connection in this event will of course not be so durable.

The inner sides of the covers may be lined 75 with paper or such like material, so as to have

a more attractive appearance.

It is evident that a double row of prongs or rivet-holes may be made on the cover, so that the part of the outer back which is inserted in 80 the folds may be united with it in the same manner as the inner one. In the manufacture of big account-books, for instance, it is evident that if the covers are to be made of a greater thickness they do not necessarily re- 85 quire a thicker plate, but may be obtained by adding some pasteboard, or such like material. Such covers and bindings are much stronger than those in common use, and cannot be damaged by breaking, or easily defaced 90 by careless handling, and the covers cannot be so easily torn off or otherwise injured in using the book. These properties render these covers and bindings very suitable for such books as are in constant or very frequent use—as, for 95 instance, school-books, depositors' books, notebooks, &c.

Having now particularly described and ascertained the nature of this invention, and in what manner the same is to be performed, I 100 declare that what I claim is—

1. As a substitute for ordinary book-covers, a cover composed of two metal plates, each having a retroverted outwardly-turned fold, g,

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such plates being connected together by a flexible back, e, clamped under and by such folds and covering the retroverted part, the folds having prongs d, or their described equiva-

5 lent, for the purpose set forth.

2. A metallic book-binding composed of two covers or plates, a, each having a fold, g, turned outward and connected by a flexible back, e, clamped by and outwardly covering both such folds, and each provided with prongs d, or their described equivalent, combined with

and secured to a book having an inner back, f, with long projecting sides, all substantially as set forth.

In testimony whereof I have signed my name 15 to this specification in the presence of two subscribing witnesses.

OTTO WILHELM KLAS-JOHAN NORDENFALK.

## Witnesses:

FREDRIK STÄNGGREN, J. H. KINDTZ.