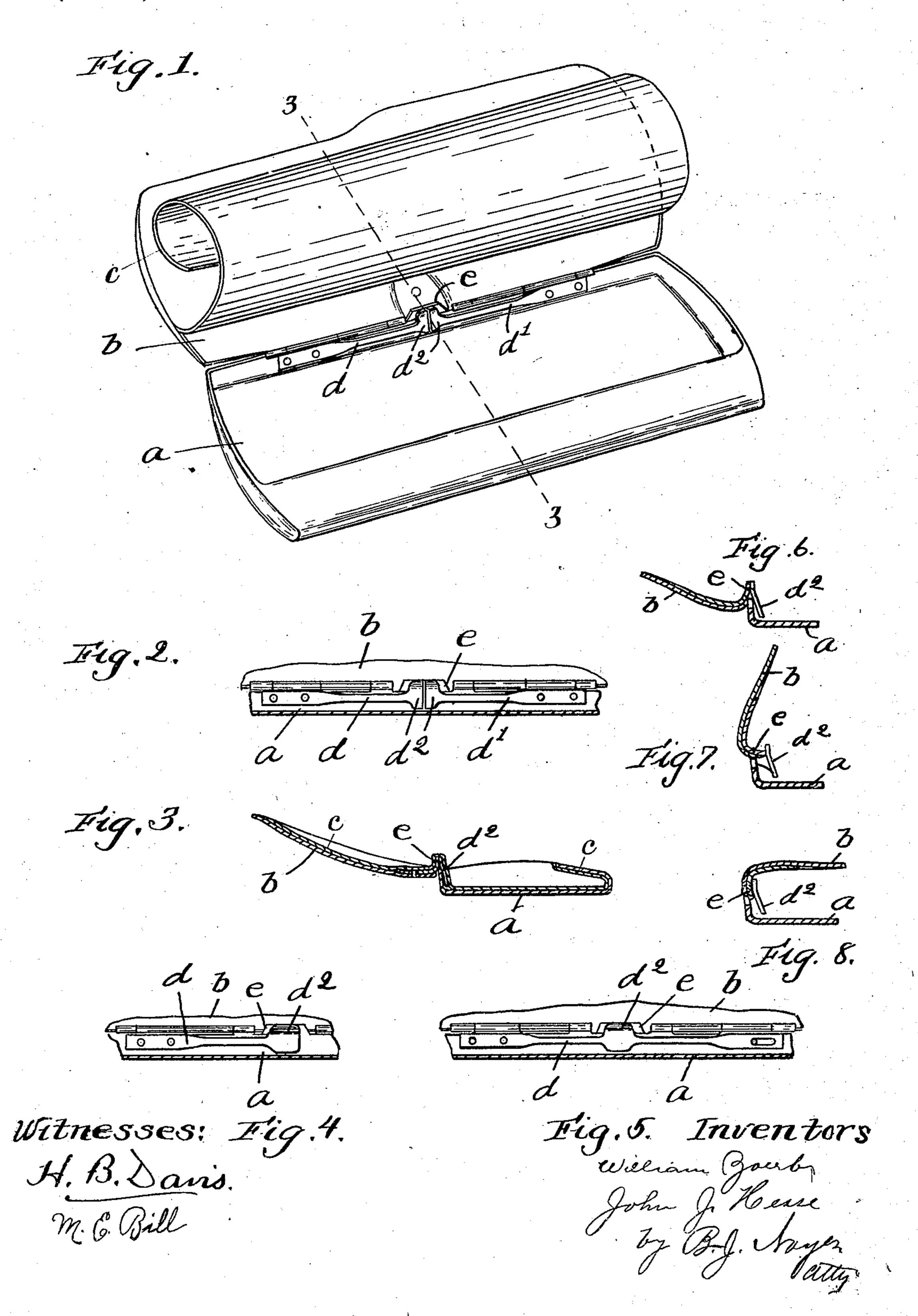
W. ZOERB & J. J. HESSE.

EYEGLASS CASE.

(Application filed Jan. 6, 1902.)

(No Model.).



United States Patent Office.

WILLIAM ZOERB AND JOHN J. HESSE, OF BOSTON, MASSACHUSETTS, ASSIGNORS, BY MESNE ASSIGNMENTS, TO ELIZABETH ZOERB, OF BOSTON, MASSACHUSETTS.

EYEGLASS-CASE.

SPECIFICATION forming part of Letters Patent No. 702,524, dated June 17, 1902.

Application filed January 6, 1902. Serial No. 88,494. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM ZOERB and JOHN J. HESSE, of Boston, county of Suffolk, State of Massachusetts, have invented an Im-5 provement in Eyeglass-Cases, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like

parts.

10 Eyeglass-cases as ordinarily made consist of a pair of lids hinged together and covered on the outside with leather and lined on the inside with some textile material, although all sorts of coverings and linings are used on 15 the lids. The lining on the inside of both lids of the pair is usually made in one piece, notwithstanding said lids are hinged together, the hinged connection being thereby concealed by said lining on the inside of the 20 case. Much difficulty has been experienced in lining eyeglass-cases having spring-hinge connections by reason of the fact that the lining which covers or incloses, and thereby conceals the spring-hinge, has a tendency in 25 some instance to catch on the spring-hinge, in other instances to work into or between the coöperative parts of the spring-hinge, and in other instances to become more or less detached from the lids by the spring-hinge.

Our invention relates to eyeglass-cases of the ordinary type composed of a pair of hinged lids and a one-piece lining, and has for its object to improve the construction of the spring-hinge connection, whereby it is 35 especially adapted for use on cases of this general type and by which special provision is made against the lining interfering in any way with the action of the spring-hinge, or

vice versa.

The invention consists, essentially, in a spring-hinge composed of a spring-acting element on one lid and a cam engaging it on the other lid, said cam working up and down uniformly below the top of said spring-acting 45 element and said spring-acting element being constructed and arranged to support the lining at a suitable predetermined elevation at all times, so that while said spring-acting element holds the lining in a predetermined position the cam is free to work up and down 50 back of it below its upper edge as the lids

are opened and closed.

Figure 1 shows in perspective view an eyeglass-case embodying this invention, the lining being turned up to expose the spring- 55 hinge. Fig. 2 is a detail showing the springhinge in side elevation. Fig. 3 is a crosssection of the eyeglass - case, taken on the dotted lines 3 3, Fig. 1. Fig. 4 is a detail showing a modified form of spring-hinge which 60 comes within the spirit and scope of this invention. Fig. 5 is a detail of another modified form of spring-hinge which comes within the spirit and scope of this invention. Figs. 6, 7, and 8 are details of the spring-hinge, 65 showing the lids in several different positions.

ab represent the two lids of the case, which may be of any usual or suitable construction and shape, and c represents the lining, which is composed of some suitable textile or other 70 material. The two lids a b are hinged together, and a spring-hinge connection is herein provided. On one of the lids, as a, for instance, a spring-acting element is provided which forms a cooperative part of the spring-75 hinge connection, and, as herein shown in Figs. 1 to 3, said spring-acting element consists of two spring-acting arms d d', each attached at one end to the lid and being free or unattached at its opposite end. The arms 80 d d' are disposed lengthwise the case and attached to the upturned rear edge of one of the lids. The free or unattached ends of said spring-acting arms d d' are each formed with broad end portions d^2 , the remaining portions 85 of said arms being quite slender. The broad end portions d^2 of said arms are located quite close together and side by side and are set edgewise or vertically disposed. The movement of these arms is but little, as but little 90 is required. By vertically disposing the broad end portions of the arms it will be seen that they serve to hold the lining up away from the case and in a predetermined elevation as the lids are opened and closed. The 95 broad end portions d^2 are bent to provide on their rear sides two faces disposed at differ-

ent angles, which form at their junction a

slight projection, yet these two angularlydisposed faces may be formed otherwise than

by bending said end portions.

e represents a cam which is attached to the 5 lid b, it being made as a strip of metal attached to the lid, having an upturned end portion. The cam e engages the end portions d^2 of the spring-acting element, and said cam is so proportioned and disposed that it works 10 up and down below the top of said end portions d^2 , which latter are made large enough to cover or include the prescribed movement or travel of the cam, and as said cam does not project beyond the end portions d^2 it will 15 not interfere with the lining, particularly as the lining is held up by said end portions, and, furthermore, said lining will not interfere with the action of the spring-hinge connection. As the lid b, bearing the cam e, is 20 opened and closed the cam will act upon one and then the other face of the end portions d^2 , and as it passes the junction of said angularly-disposed faces its further movement will be assisted by the spring action of the 25 arms.

In Fig. 4 a modified form of spring-acting element is shown wherein but a single-spring acting arm is employed, its end portion d^2 being made somewhat larger than that shown 30 in Figs. 1 to 3, yet its coöperation with the

cam is practically the same.

In Fig. 5 another modified form of springacting element is shown wherein a single spring-acting strip is employed, which com-35 prehends in a single piece the two arms shown in Figs. 1 to 3. In this instance the opposite ends of the strip are slotted to provide for the slight movement due to the action of the cam thereon.

We do not desire to limit our invention to any particular form or construction of springacting element so long as it is constructed and arranged to cover or include the movement of the cam and hold the lining from in-45 terfering with the action of the spring-hinge connection.

What we do claim, and desire to secure by

Letters Patent, is—

1. In an eyeglass-case, the combination of 50 the lids and lining and a spring-hinge connection concealed beneath the lining, comprising a spring-acting element on one lid, constructed and arranged to support the lin-

ing at a predetermined elevation as the lids open and close, and a cam on the other lid 55 working up and down uniformly below the top of said spring-acting element, substan-

tially as described.

2. In an eyeglass-case, the combination of the lids and lining and a spring-hinge con- 60 nection concealed beneath the lining, comprising a spring-acting element on one lid having a vertically-disposed end portion to support the lining at a predetermined elevation as the lids open and close, and a cam on the 65 other lid engaging said spring-acting element and working up and down uniformly below the top of the end portion thereof, substan-

tially as described.

3. In an eyeglass-case, the combination of 70 the lids and lining and a spring-hinge connection concealed beneath the lining, comprising a spring-acting element on one lid consisting of a pair of spring-acting arms having vertically-disposed end portions located side 75 by side, and a cam on the other lid engaging said spring-acting element and working up and down below the top of the end portions of said spring-acting arms, substantially as described.

4. In an eyeglass-case, a spring-hinge connection for the lids comprising a spring-acting element on one lid consisting of a springacting arm disposed lengthwise the case and attached at one end to the upturned rear edge 85 of one of the lids and having at its extremity a broad end portion, vertically disposed, and a cam on the other lid engaging said broad end portion and working up and down below its top, substantially as described.

5. In an eyeglass-case, a spring-hinge connection for the lids comprising a spring-acting element on one lid having a verticallydisposed portion formed with angularly-disposed faces on its rear side and a cam on the 95 other lid working up and down below the top of said portion and across the junction of said faces, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of roo

two subscribing witnesses.

WILLIAM ZOERB. JOHN J. HESSE.

90

Witnesses:

B. J. Noyes, H. B. DAVIS.