

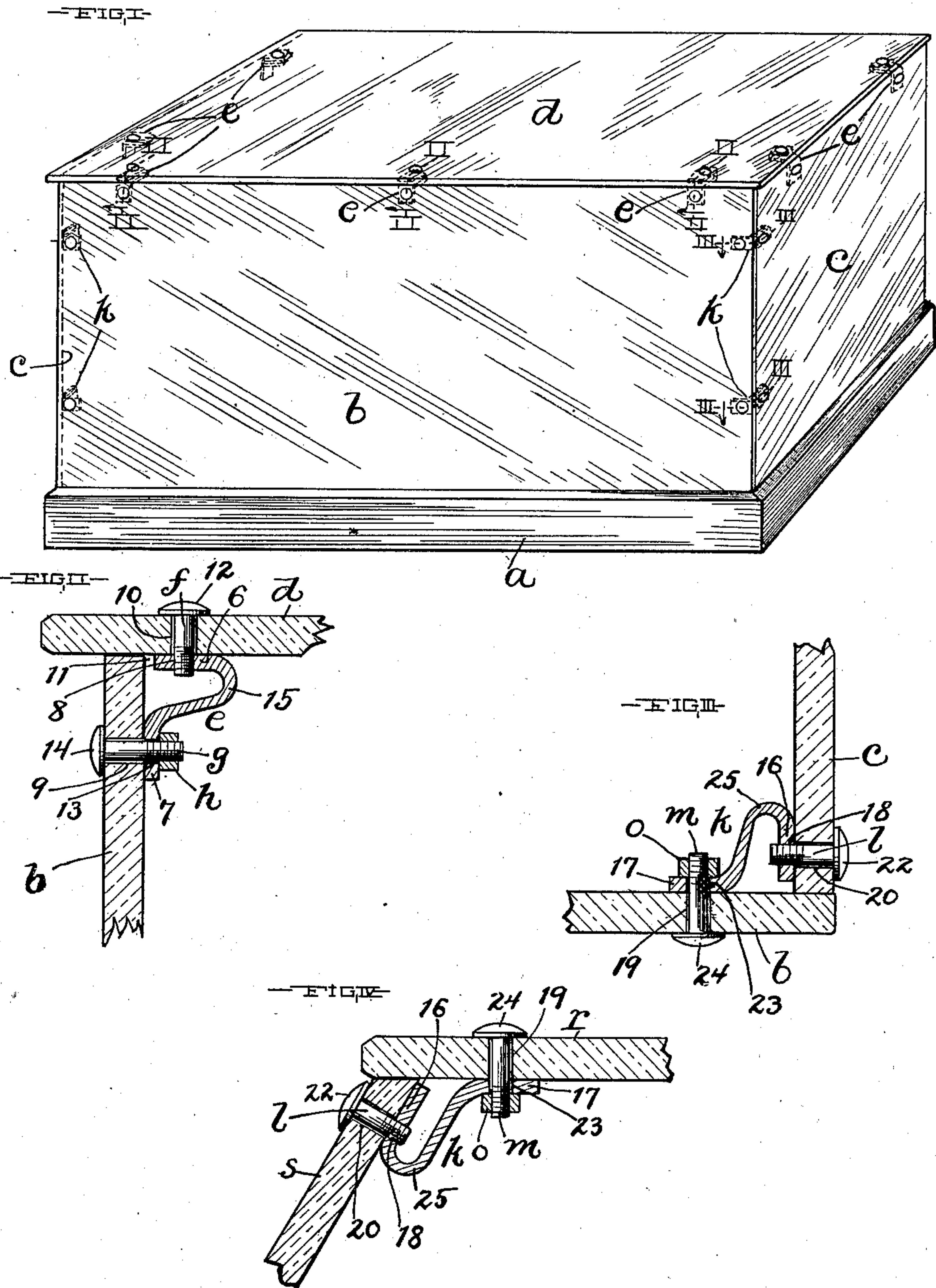
No. 702,444.

Patented June 17, 1902.

C. F. KURZ.
SHOW CASE OR SHOW FRONT.

(Application filed May 10, 1901.)

(No Model.)



WITNESSES:
Daniel E. Daly.
A. H. Parratt

INVENTOR
Charles F. Kurz
BY
Sydney Wore
his ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES F. KURZ, OF CLEVELAND, OHIO.

SHOW-CASE OR SHOW-FRONT.

SPECIFICATION forming part of Letters Patent No. 702,444, dated June 17, 1902.

Application filed May 10, 1901. Serial No. 59,688. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. KURZ, a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Show-Cases or Show-Fronts; 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 pertains to make and use the same.

My invention relates to improvements in so-called "all-glass" show-cases and show-fronts.

The object of this invention is to reduce to a minimum the liability of the glass plates of the show-case or show-front to be broken by a pressure or strain accidentally or otherwise brought upon or against the said plates.

With this object in view, and to the end of greatly simplifying the means employed to fasten the plates together, my invention consists in certain features of construction and combinations of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure I is a view in perspective of a so-called "all-glass" show-case embodying my invention. Fig. II is an enlarged vertical section on line II II, Fig. I, and illustrates the manner of attaching the top plate to the upright plates of the case. Fig. III is a top plan in section on any one of lines III III, Fig. I, and illustrates the manner of fastening together the front plate and the end plates of the case. Fig. IV is a top plan in horizontal section, showing two glass plates of a show-front arranged at an angle to each other and fastened together according to my invention.

Referring to Fig. I of the drawings, *a* designates the base of a show-case; *b*, the upright glass front or front plate of the case; *c* and *c*, the upright glass end plates of the case, and *d* the glass top or top plate of the case. The front plate *b* and end plates *c c* are shown arranged vertically and assembled upon the base *a* in any approved manner. The front plate preferably overlaps the forward edges of the end plates, as shown in Fig. III. The top plate preferably overlaps and projects outwardly beyond the upper edges of the front plate and end plates, as shown in Fig. II.

The means employed for attaching the upright plates *b* and *c* of the show-case to the top plate *d* of the case and for holding the top plate down upon the plates *c* and *b* comprises several corresponding fastening devices arranged a suitable distance apart along the upper edges of the said upright plates of the show-case, and one of the said fastening devices is shown very clearly in Fig. II, upon reference to which it will be observed that the said fastening device comprises a metallic strap *e*, having its opposite end portions 6 and 7 arranged at right angles to each other and abutting and secured to the inner side of the different plates assembled and held in their assembled position through the instrumentality of the fastening device comprising the said strap. The end portion 6 of the said strap, which engages or bears against the under or inner side of the top plate *d*, has a screw-threaded hole 8, engaged by a correspondingly-threaded screw *f*, which extends through a hole 10, formed in the top plate, and has its head 12 engaging or bearing against the outer side of the said plate. The end member 6 of the said strap forms, therefore, a nut which coöperates with the engaging screw *f* in securing the strap to the top plate. The other end member, 7, of the said strap, which engages or bears against the upright plate of the two plates held together by the said strap, forms an ear, being provided with a hole 13, through which extends a screw *g*, which extends through a hole 9, formed in the front plate *b*, and has its head 14 engaging or bearing against the outer side of the said upright plate, and a nut *h* is mounted upon the said screw *g* at the inner side of the ear-forming end member 7 of the aforesaid strap and coöperates with the screw *g* in securing the strap to the said upright plate. The said strap bows inwardly, as at 15, between its end members 6 and 7, so as to form a bow-shaped spring between the said end members.

The simplicity of the hereinbefore described fastening means between the top plate and the upright plates is obvious. It will be observed that any blow or pressure upwardly upon the projecting portion of the top plate is not likely to result in the break-

age of the said top plate or of the upright plates, because the spring-forming bow or central portion of the plate-fastening straps will adequately yield to such blow or pressure.

5 The spring-forming members of the fastening-straps will obviously also yield to a blow or pressure edgewise upon the top plate or to a lateral blow or pressure upon the upright plates. The nut-forming member 6 of each
10 strap terminates a short distance from the inner side of the upright plate to which the said strap is secured, so that a space 11, as shown very clearly in Fig. II, shall be formed between the said upright plate and the said end
15 member of the strap to accommodate a slight lateral displacement of the upright plate or an edgewise displacement forwardly and rearwardly of the top plate.

The means employed for attaching together
20 the front plate and an end plate is illustrated in Fig. III and is substantially the same as the means employed in attaching the upright plates and the top plate of the show-case together—that is, the means employed for at-
25 taching two adjacent upright plates of the show-case together comprises, preferably, a plurality of corresponding fastening devices arranged a suitable distance apart vertically along the adjacent upright edges of the said
30 plates, and one of the said fastening devices is shown very clearly in Fig. III, upon reference to which it will be observed that the said fastening device comprises a metallic strap
35 *k*, having its opposite end portions 16 and 17 arranged at right angles to each other and abutting and secured, respectively, to the inner side of the different plates assembled and held in their assembled position through the
40 instrumentality of the fastening device comprising the said strap. The end portion 16 of the said strap *k*, which engages or bears against the inner side of the end plate *c*, has a screw-threaded hole 18, engaged by a correspondingly-threaded screw *l*, which extends
45 through a hole 20, formed in the said end plate, and has its head 22 engaging or bearing against the outer side of the said plate. The end member 16 of the said strap *k* forms, therefore, a nut which coöperates with the
50 engaging screw *l* in securing the said strap to the said end plate. The other end member 17 of the said strap *k*, which engages or bears against the front plate *b*, forms an ear which is provided with a hole 23, through which
55 loosely extends a screw *m*, which has its head 24 engaging or bearing against the outer side of the said front plate, and a nut *o* is mounted upon the said screw *m* at the inner side of the said member 17 of the said strap *k* and co-
60 operates with the screw *l* in securing the strap to the said front plate. The said strap *k* bows inwardly, as at 25, between its end members 16 and 17, so as to form a bow-shaped spring between the said end members. The central
65 spring-forming portion of the said strap *k* obviously enables the fastening device formed by the said strap and the means employed in

attaching it to the connected plates *c* and *b* to adequately yield to any lateral blow or pressure against the said end plate and to there-
70 by prevent such blow or pressure resulting in the breakage of or injury to the assembled plates. The said spring-forming portion of the strap *k* will obviously also yield to a blow or pressure endwise upon the front plate. 75

In fact, a show-case or show-front having its glass plates formed and fastened together by means embodying my invention is quite safe against a blow or pressure applied from
80 any direction. 80

Fig. IV illustrates two upright plates of a show-window arranged at an obtuse angle to each other, and *r* represents the front plate, and *s* the side plate, of this window. The front plate *r* overlaps the adjacent upright
85 edge of the side plate *s*, and the two plates *r* and *s* are attached together at their adjacent edges by means substantially the same as is employed in attaching together the two up-
90 right plates of the show-case, illustrated in Figs. I, II, and III. The front plate *r* of the show-window corresponds to the front plate *b* of the show-case, and the side plate *s* of the window corresponds to an end plate of the
95 show-case. The same letters of reference applied to the members of the fastening means in Fig. III are applied to the corresponding members in Fig. IV. The fastening means
100 illustrated in Fig. IV differs only from the fastening device shown in Fig. III in that the fastening device shown in Fig. IV has its end portions 16 and 17 arranged at an obtuse angle to each other to conform to the corresponding arrangement of the plates *r* and *s*. 100

I would remark that my invention is not
105 limited to the exact details of construction illustrated and described, but embraces, broadly, a show-case or show-front having two glass plates arranged at an angle to each other and a metallic strap at the inner sides of the
110 said plates, which strap is secured at opposite ends to the different plates, respectively, and has the central portion thereof bowed to form a spring. 110

What I claim is— 115

1. In a show-case or show-front, the combination, with two glass plates arranged at an angle to each other with one of the said plates overlapping an edge of the other plate, of a fastening device instrumental in holding the
120 said plates together and comprising a metal strap attached at opposite ends to the different plates, respectively, with the central portion of the straps of spring metal and bowed laterally, substantially as and for the purpose
125 set forth. 125

2. In a show-case or show-front, the combination, with an upright glass plate and a top plate resting upon and overlapping the upper edge of the said upright plate, of fastening
130 devices for attaching the said top plate to the said upright plate, which fastening devices comprise, respectively, a metallic strap attached at opposite ends to the inner side of 130

the different plates, respectively, and having its central portion of spring metal bowed inwardly to form a spring, and the top-plate-connected end of the strap being separated a short distance from the upright plate, substantially as and for the purpose set forth.

3. In a show-case or show-front, the combination, with an upright plate and a top plate overlapping and resting upon the said upright plate, of a spring-metal strap arranged at the inner sides of the said plates at the corner formed between the plates, which strap has its upper end extending along the under side of the top plate and provided with a screw-threaded hole so as to form a nut and has its opposite end extending along the inner side of the upright plate and provided with a hole extending therethrough so as to

form an ear, which strap is bowed inwardly between its ends so as to form a spring, a screw extending through the top plate and engaging the hole in the nut-forming member of the strap and having a head arranged at the upper or outer side of the top plate, another screw extending through the upright plate and through the hole in the ear-forming member of the strap and having a head arranged at the outer side of the said upright plate, and a nut mounted upon the last-mentioned screw at the inner side of the strap.

Signed by me at Cleveland, Ohio, this 8th day of May, 1901.

CHARLES F. KURZ.

Witnesses:

C. H. DORER,

A. H. PARRATT.