

(No Model.)

A. H. HASTINGS.
HINGE.

No. 423,247.

Patented Mar. 11, 1890.

Fig. 1.

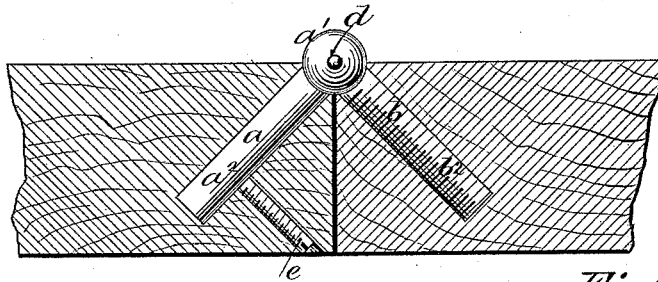


Fig. 2.

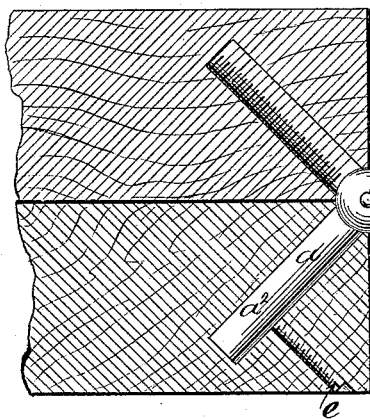


Fig. 3.

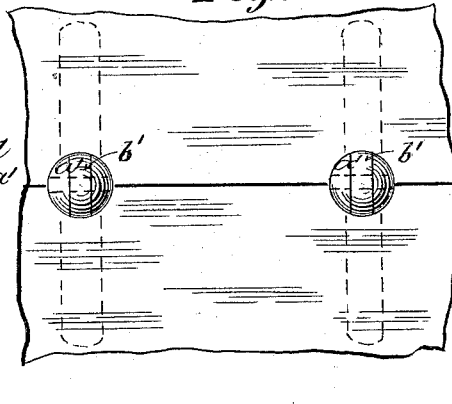


Fig. 4.

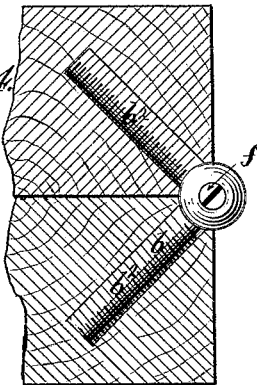


Fig. 5.

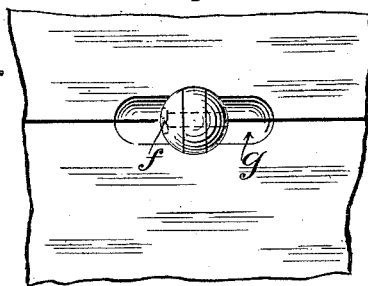


Fig. 6.

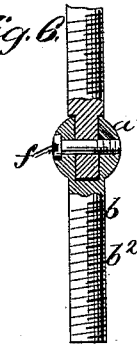
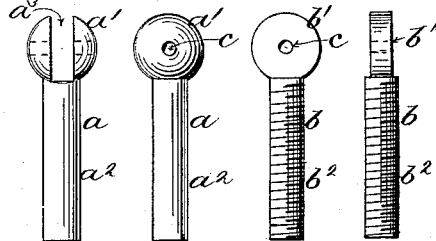


Fig. 7. Fig. 8. Fig. 9. Fig. 10.



Witnesses:

W. J. Gardner
Frederic Caragan

Inventor:

A. Horace Hastings
By his Attorney
Emmett Webb

UNITED STATES PATENT OFFICE.

AZARIAH HORACE HASTINGS, OF NEW YORK, N. Y.

HINGE.

SPECIFICATION forming part of Letters Patent No. 423,247, dated March 11, 1890.

Application filed October 26, 1889. Serial No. 328,282. (No model.)

To all whom it may concern:

Be it known that I, AZARIAH HORACE HASTINGS, a citizen of the United States, residing at New York city, in the county and State of New York, have invented certain new and useful Improvements in Hinges, of which the following is a description.

My invention relates to certain improvements in hinges, the object being to produce a hinge of globular or spherical form, with no angular, pointed, or rough edges or projections, and dispensing with brackets for applying and connecting the hinge in use. The hinges now commonly on the market are objectionable, for the reason that when brackets are employed or when the hinge itself has angular edges or sharp points it is very difficult to properly polish the surface of the hinged parts, and this is particularly objectionable in piano or fine cabinet work. Moreover, the brackets and irregular parts of the hinge tend to scratch and injure the polished surface.

By my invention these objections are obviated; and my invention consists in a hinge comprising two parts or members, one of which is of globular or spherical shape, centrally kerfed or recessed, and terminating in a shank, and the other a ring terminating in a shank, the ring fitting within the kerf or recess of the spherical or globular member and the two parts pivotally connected, as hereinafter set forth.

My invention also includes certain details of construction, which are hereinafter described.

In the accompanying drawings, illustrating my invention, in which like parts are designated by similar letters of reference, Figure 1 is a central section through two parts connected by my improved hinge—such as a piano-lid, for instance—the hinge being shown in side elevation. Fig. 2 is a similar view, with one of the hinged parts turned over upon and in contact with the other. Fig. 3 is a top plan view of Fig. 1. Fig. 4 is a central section through the hinged parts, illustrating a modification of my invention. Fig. 5 is a top plan view thereof. Fig. 6 is a side view of the modified form of hinge, with the pivoted connection shown in section. Figs. 7, 8, 9, and

10 are details of the parts forming the hinge, shown detached.

As shown in Figs. 1, 2, 3, 7, 8, 9, and 10, my improved hinge is composed of two parts *a b*. The part *a* comprises a globular or spherical-shaped head *a'* and a shank or leg *a²*. The head *a'* is centrally kerfed or recessed at *a³*. The part *b* comprises a flat ring-shaped head *b'* and a shank or leg *b²*. Both heads are provided with a central aperture *c*, and the two parts are united together by inserting the flat ring-shaped head *b'* into the recess *a³* of the head *a'* and pivotally securing the two together by a pintle or rivet *d*, which extends through the aperture *c*. Either or both the shanks or legs *a² b²* may be screw-threaded, and when of the construction just described the hinge is applied and used as follows: The two parts to be hinged together are first bored to form grooves to receive the shanks *a² b²*. These grooves are formed at about the angle shown in the drawings, so as to insure close contact of the hinged parts. The two parts of the hinge being first pivotally connected as described, the shank *b²* is screwed into one of the grooves, and the other shank *a²* is inserted in the other groove, and a set-screw *e* is inserted at right angles to the groove and bears tightly against the shank *a²*. As shown, this shank *a²* is plain-faced; but, if desired, it may be roughened, so that the set-screw will take hold better and hold it more firmly in position.

In the modification of my invention shown in Figs. 4, 5, and 6 both shanks *a² b²* are screw-threaded, and are screwed into the grooves in the parts to be hinged before the heads *a' b'* are united. In this construction the heads *a' b'* are pivotally connected by means of a set-screw extending through the aperture *f*, and the parts to be hinged are grooved at *g*, so that the set-screw can conveniently be inserted in place after the head *b'* has been fitted in the recess *a³* in the head *a'*.

My improved hinge is of economical construction, neat and attractive in appearance, and can be readily applied. It is particularly adapted to piano and fine cabinet work, but may, of course, be used for other purposes. As compared with other hinges now on the market it has the advantage of doing away with brackets, and all the parts of the hinge

excepting the head are concealed, even when the set-screw *e* is employed, as this is countersunk and the head covered up.

What I claim as my invention, and desire
5 to secure by Letters Patent, is—

1. A hinge comprising two parts or members, one of which is of spherical shape, centrally kerfed or recessed, and terminating in a shank, and the other a ring terminating in
10 a shank, the ring fitting within the kerf or recess of the spherical member and the two parts pivotally connected, substantially as described.

2. A hinge comprising two parts or mem-

bers, one of which is of spherical shape, centrally kerfed or recessed, and terminating in
15 a shank, and the other a ring terminating in a shank, the ring fitting within the kerf or recess of the spherical member and the two parts pivotally connected and combined with
20 a set-screw, substantially as described.

In testimony whereof I have hereunto set my hand this 23d day of October, A. D. 1889.

A. HORACE HASTINGS.

Witnesses:

FREDERIC CARRAGAN,
THORNE S. WALLING.