

No. 765,942.

PATENTED JULY 26, 1904.

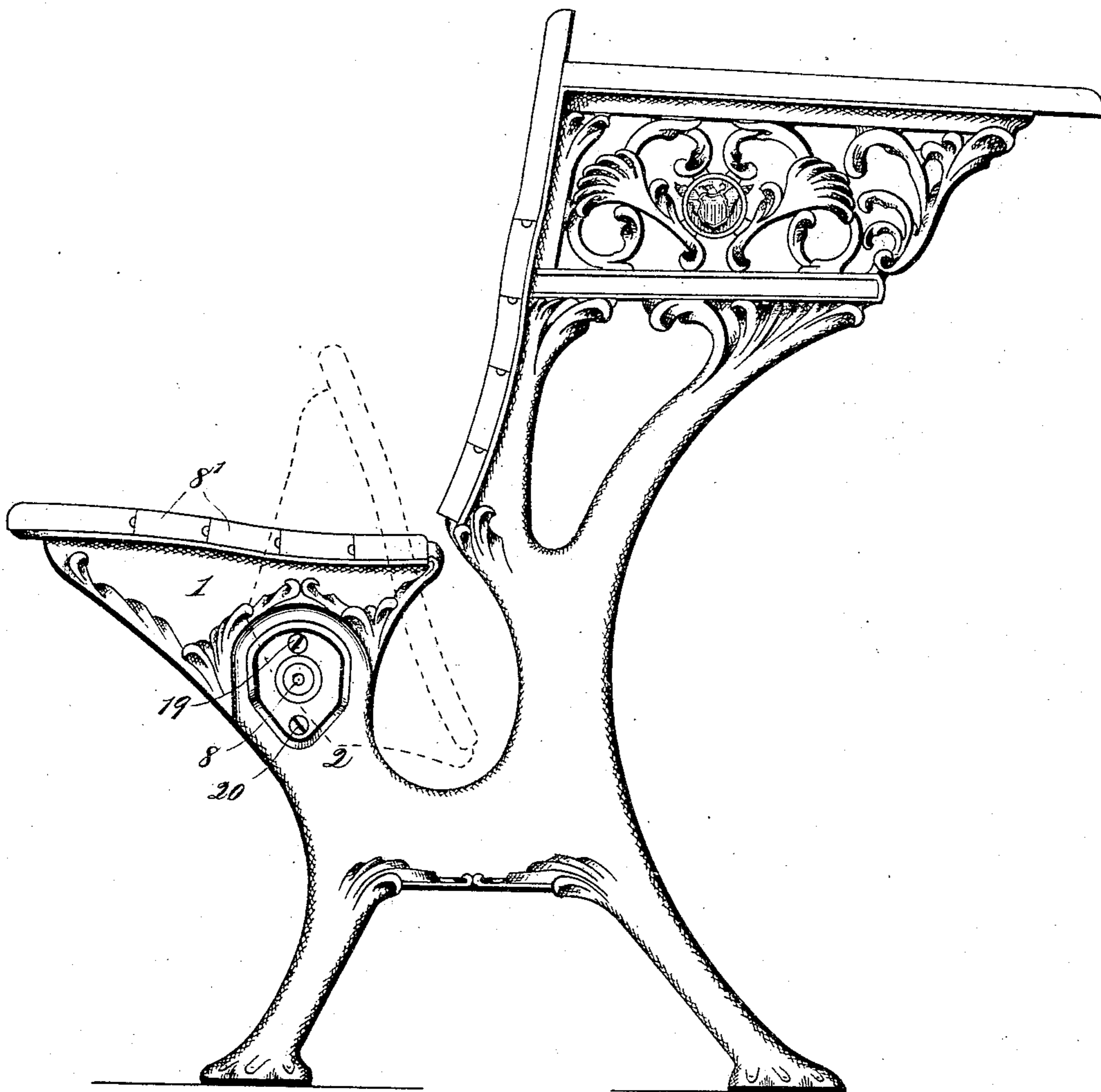
J. H. STIGGLEMAN.  
FURNITURE HINGE.

APPLICATION FILED NOV. 11, 1902.

NO MODEL.

3 SHEETS—SHEET 1.

*Fig. 1.*



WITNESSES:

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*C. E. Duff*

INVENTOR

*J. H. Stiggeman,*

BY

*C. E. Duff* Attorney

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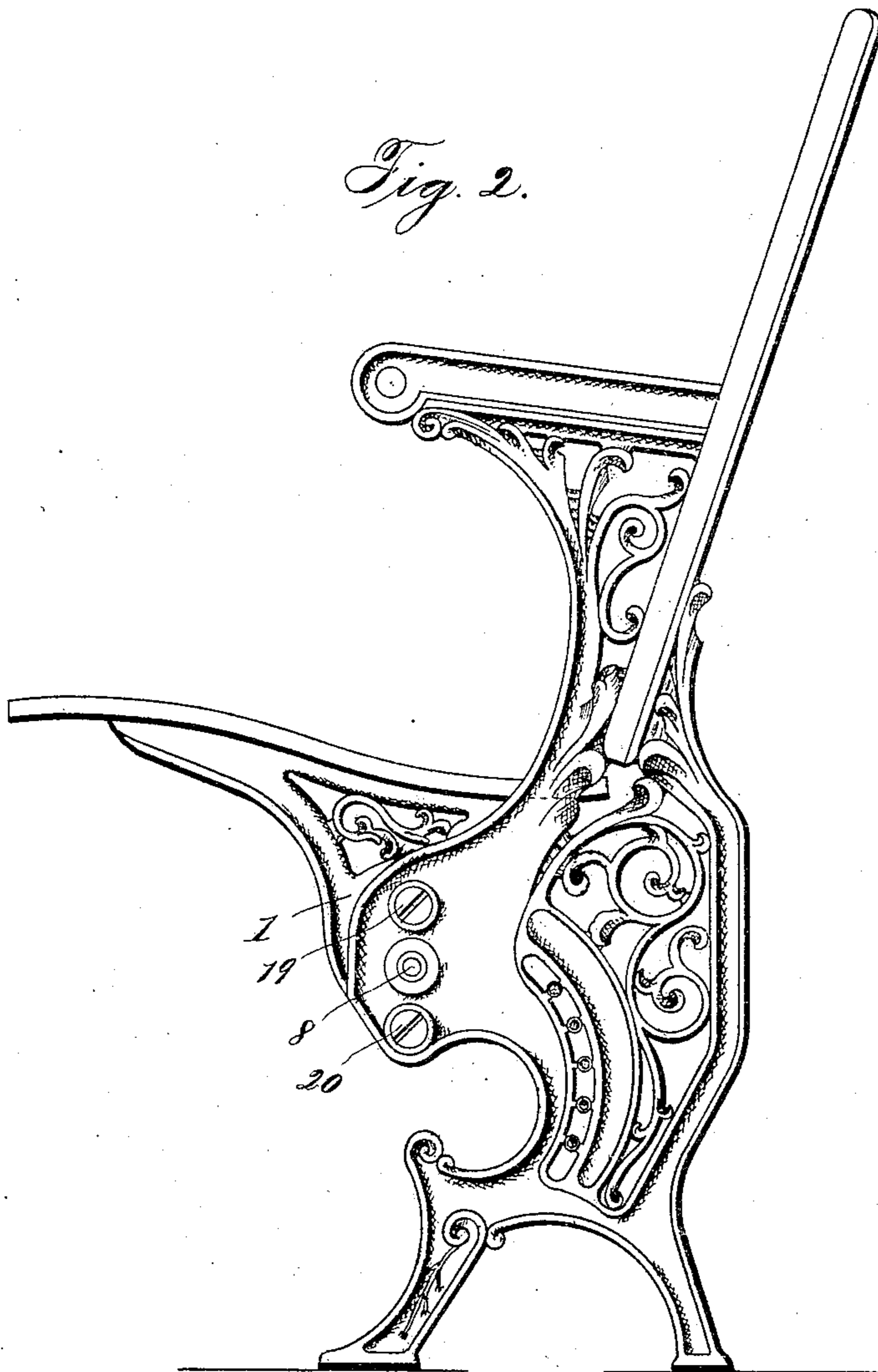
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3 SHEETS—SHEET 2.

*Fig. 2.*



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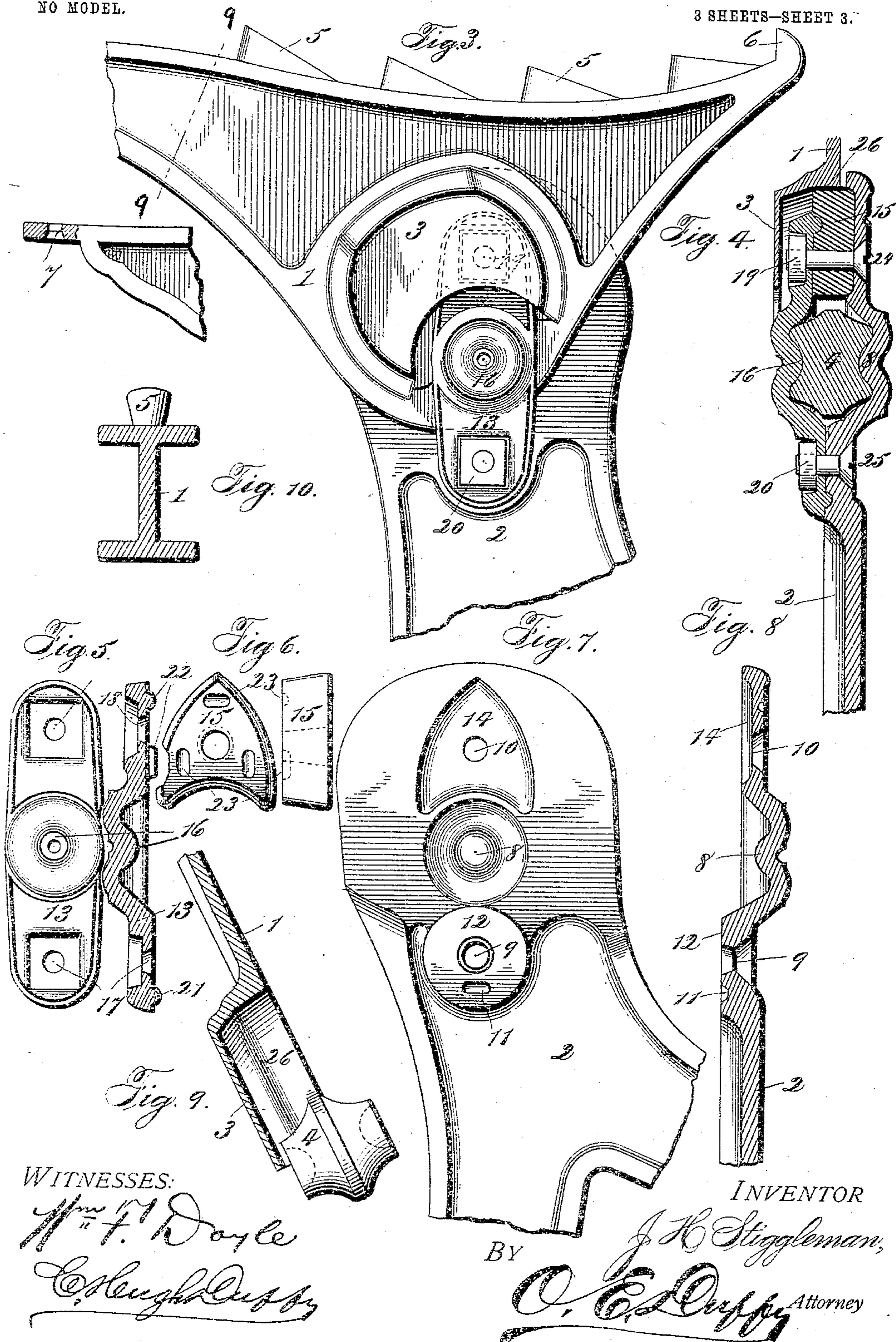
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3 SHEETS—SHEET 3.



# UNITED STATES PATENT OFFICE.

JAMES HENRY STIGGLEMAN, OF WABASH, INDIANA, ASSIGNOR TO  
THE PEABODY-STIGGLEMAN COMPANY, OF NORTH MANCHESTER,  
INDIANA.

## FURNITURE-HINGE.

SPECIFICATION forming part of Letters Patent No. 765,942, dated July 26, 1904.

Application filed November 11, 1902. Serial No. 130,826. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES HENRY STIGGLEMAN, a citizen of the United States, residing at Wabash, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Furniture-Hinges; and I do 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 the figures of reference marked thereon, which form a part of this specification.

My invention relates to hinges, but more particularly to furniture-hinges, and has for its object to provide a device of this class wherein friction and noise are reduced to a minimum.

A further object of my invention is to provide a furniture-hinge which is extremely simple in its construction and particularly free from complicated mechanism.

A further object of my invention is to provide a furniture-hinge which combines simplicity, strength, durability, and efficiency.

With all these objects in view my invention consists in the novel construction and arrangement of my furniture-hinge.

My invention also consists in certain features of construction and in combination of parts, which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is an elevation of my invention applied to a school-desk. Fig. 2 is an elevation showing its application to an opera-chair. Fig. 3 is a rear elevation of the hinge and base for seat. Fig. 4 is a vertical section on Fig. 3. Fig. 5 shows an elevation and vertical section of the removable trunnion-plate. Fig. 6 shows a front and side elevation of the buffer or stop. Fig. 7 is a rear elevation of the trunnion portion of the lower or leg section. Fig. 8 is a vertical section taken on Fig. 7. Fig. 9 is a view of the double trunnion-bearing, showing cup and part of seat-base in section. Fig. 10 is a section of seat-base, taken on the line 9 9 of Fig. 3.

Like numerals of reference indicate the same parts throughout the several figures, in which—

1 is the upper section of the hinge, which will for convenience be called the "seat-section," and 2 is the lower section of the hinge, which for convenience will be termed the "leg-section."

The seat-section 1 is provided with a cup 3 and a double trunnion-bearing 4 below said cup, and as shown in Fig. 3, the top of said section or seat-base is provided with a series of slanting dovetailed projections 5, a stop 6 on the inner end thereof, and a screw-opening 7 at the outer end. With this construction, which is adapted particularly for school-seats, the wood seat-pieces 8' are provided with dovetailed grooves registering with the dovetailed projections 5 and are slid on said projections one after the other, the first resting against the stop 6 and the last being held in position by a screw passing through the screw-hole 7 in the outer end of the seat-base.

The office of the cup 3 is to provide for a strong and rigid bearing for the buffer or stop 15, as the said cup makes the upper section practically solid, so as to stand the strain of a sudden stop of the hinge. An opening in said upper section for the stop 15 in place of the cup 3 would render said section weak and liable to break under a heavy strain or sudden jar.

To return now to the hinge proper, the lower or leg section 2 is provided with a trunnion 8 and two bolt-holes 9 and 10 directly above and below the same. Below the lower bolt-hole 9 is a small groove 11, and a seat 12 is formed around said bolt-hole for the removable trunnion-plate 13. Above said trunnion 8 and surrounding the upper bolt-hole 10 I show a heart-shaped depression 14 to receive the buffer or stop 15.

The removable trunnion-plate 13 is provided at its center with a trunnion 16 and two bolt-holes 17 and 18 above and below the same, the metal surrounding said holes being depressed in order to hold nuts 19 and 20. Below the lower bolt-hole 17 I provide an extension 21, which enters the small groove 11

in the lower or leg section in order to prevent any motion when the parts are assembled. Above and below the upper bolt-hole 18 I provide a series of projections 22 and a corresponding number of depressions 23 in the buffer or stop 15, so as to hold said trunnion-plate and buffer firmly together.

Having thus described the several parts of my invention, they are assembled as follows:

10 The upper or seat section is placed against the lower or leg section 2, so that the trunnion-bearing 4 engages the trunnion 8 in the lower section. The buffer or stop 15 is then laid on the seat 14, and the removable trunnion-plate 13 is placed in position with the trunnion 16 engaging the trunnion-bearing 4 and the bolt-holes 17 and 18 registering with the bolt-holes 9 and 10 and the projections 22 entering the depressions 23 in the buffer or stop 15. The nuts 19 and 20 are then placed in their seats, and the bolts 24 and 25 are passed through the holes 9 and 10 and threaded into the nuts, which causes the two trunnions 8 and 10 to tightly engage the double trunnion-bearing 4, as shown in Fig. 4.

It will be noticed by referring to Fig. 3 that the cup 3 surrounds the upper portion of the trunnion-plate 13 and the buffer or stop 15. Said buffer or stop is preferably made of a composition of hard fiber and asbestos and is practically indestructible.

When the seat-section is swung into position, (shown in Fig. 3,) the inner wall 26 of the cup strikes the buffer or stop 15 and rests against the same while in this position. Thus it is seen that the operation of throwing the seat-section into position is practically noiseless, and in like manner when raising the seat out of position, as shown in dotted lines in Fig. 1, the inner wall of the cup 3 strikes the opposite curved side of the buffer or stop 15, which deadens the jar and prevents the usual noise and grating of hinges used in this capacity.

While there is little or no opportunity for wear and consequent rattling of the parts, still the nature of the buffer or stop 15 allows for any take-up necessary, which take-up is accomplished by simply tightening the bolts 24 and 25.

While I have shown and described the hinge as applied to movable seats, I do not in any way wish to be understood as limiting myself to this application, as the hinge is suitable for many other purposes and can be used with equally beneficial results wherein a furniture or like hinge can be employed.

Having thus set forth my invention, I wish to be further understood as not limiting myself to the exact construction herein set forth, as various slight changes can be made in form, construction, and arrangement which would fall within the limit and scope of my inven-

tion, and I consider myself clearly entitled to all such changes and modifications.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a furniture-hinge, the combination of an upper and a lower section, a double trunnion-bearing on said upper section and a cup on said upper section, a trunnion-plate formed on said lower section, a removable trunnion-plate, means for securing said removable trunnion-plate to said lower section below said trunnion-bearing, a buffer or stop secured between said removable trunnion-plate and said lower section and means for securing said removable trunnion-plate to said lower section, said means passing through said buffer or stop.

2. In a furniture-hinge, the combination of an upper and a lower section, a double trunnion-bearing on said upper section, a removable trunnion-plate and means for securing the same at both ends thereof to said lower section, a buffer or stop of sound-deadening material located between said removable trunnion-plate and said lower section, the whole arranged so that the said buffer or stop will allow for taking up wear between the trunnion-bearing and trunnion-plate, substantially as described.

3. In a furniture-hinge, the combination of an upper and a lower section, a double trunnion-bearing on said upper section, a removable trunnion-plate adapted to be secured to said lower section, a buffer or stop secured between said removable trunnion-plate and said lower section, and means adapted to engage said buffer or stop to hold the same rigidly in position.

4. In a furniture-hinge, the combination of the upper and lower sections, of a cup and double trunnion-bearing on said upper section, a trunnion on the lower section, a trunnion-plate adapted to engage said trunnion-bearing, a buffer or stop adapted to be engaged by said cup, and means for securing said trunnion-plate to said lower section above and below said double trunnion-bearing.

5. In a furniture-hinge, the combination of an upper and a lower section of a cup and double trunnion-bearing on said upper section, a fixed trunnion-bearing on said lower section, and a removable trunnion-plate adapted to engage one of said bearings, a buffer or stop on said lower section, means in said trunnion-plate for holding said buffer or stop in position, and means for fastening the trunnions in engagement with the trunnion-bearings.

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

JAMES HENRY STIGGLEMAN.

Witnesses:

JAMES W. STEWART,  
WILL H. ANDERSON.