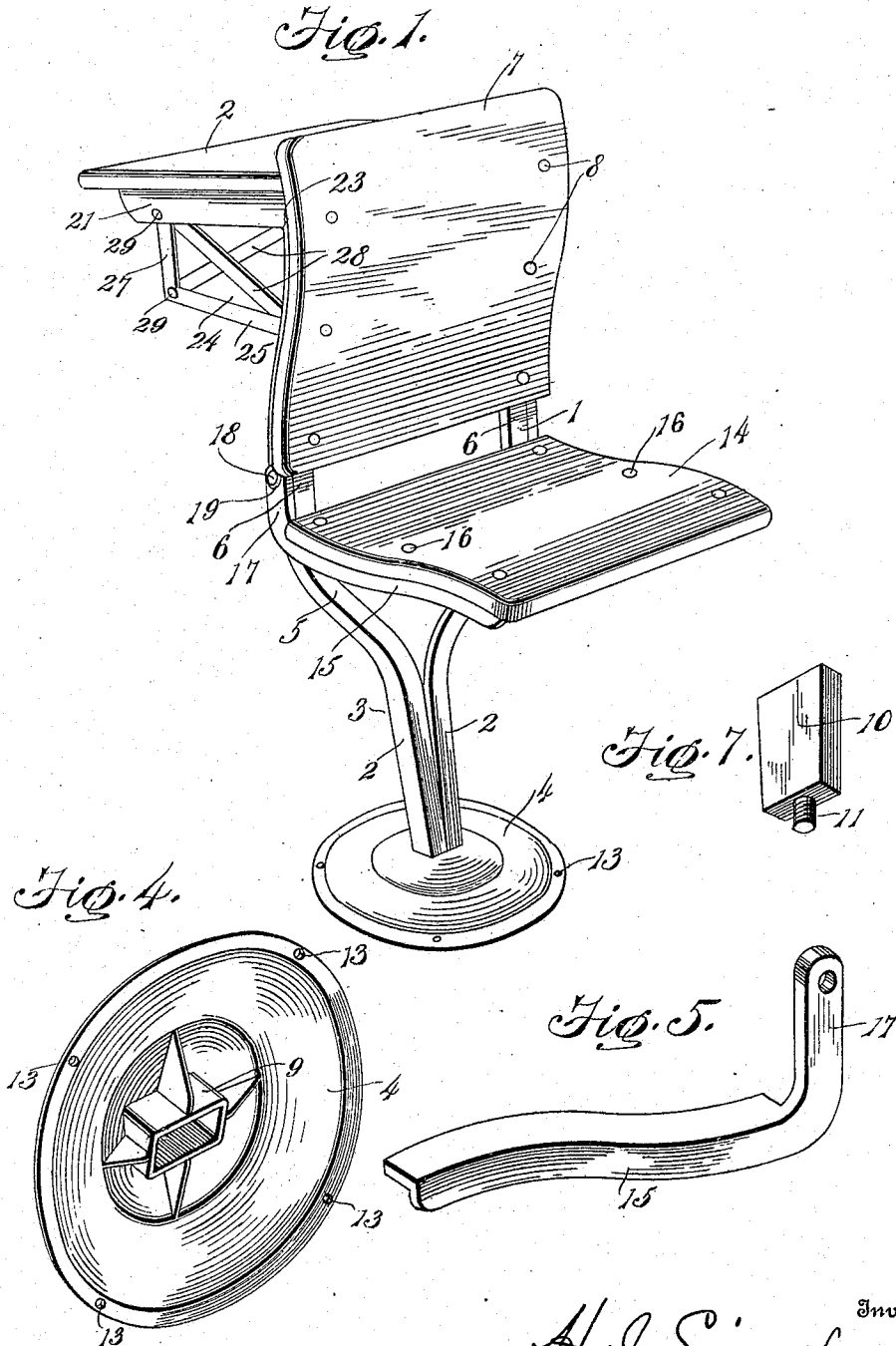


H. J. SIEMS.
 COMBINED SCHOOL DESK AND CHAIR.
 APPLICATION FILED DEC. 26, 1908.

937,103.

Patented Oct. 19, 1909.
 2 SHEETS—SHEET 1.



Witnesses
 Row D. Johnson
 Made for E. Burns.

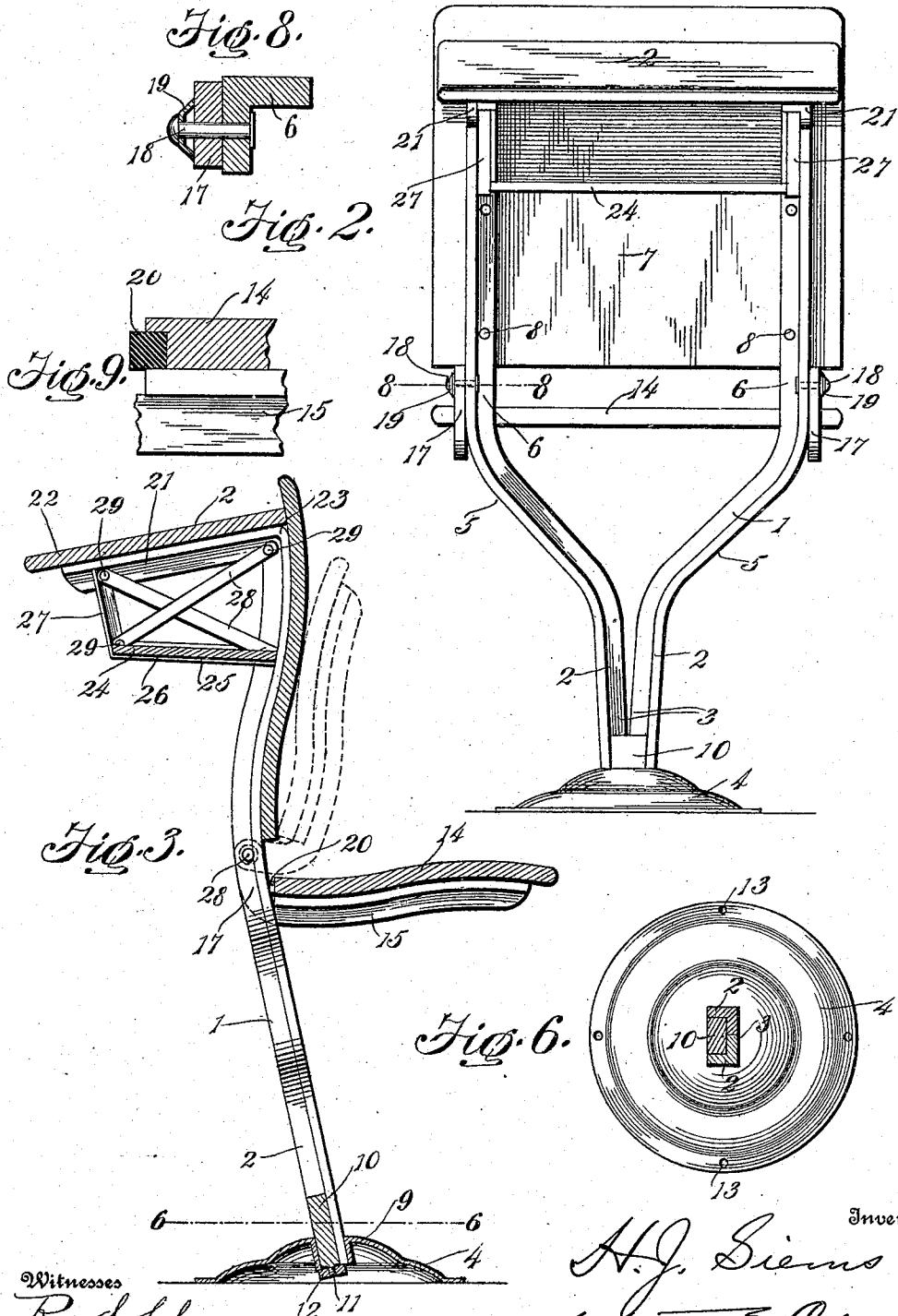
H. J. Siems Inventor
 by Watson E. Coleman Attorney

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Witnesses
 Rose S. Johnson
 Madison E. Burns.

Inventor
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UNITED STATES PATENT OFFICE.

HENRY J. SIEMS, OF SENECA, KANSAS.

COMBINED SCHOOL DESK AND CHAIR.

937,103.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed December 26, 1908. Serial No. 469,350.

To all whom it may concern:

Be it known that I, HENRY J. SIEMS, a citizen of the United States, residing at Seneca, in the county of Nemaha and State of Kansas, have invented certain new and useful Improvements in Combined School Desks and Chairs, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in chairs for schools, theaters and the like and also to an improved combination school desk and chair or seat.

The object of the invention is to provide a folding chair or a combination school desk and chair which will be composed of few simple, strong and durable parts so that they may be made and assembled at a comparatively small cost and will be exceedingly well adapted to stand the hard usage to which such articles of furniture are subjected.

A further object of the invention is to provide a chair which when folded occupies but little space and permits the floor under and around it to be easily swept and scrubbed, this feature also rendering the chair exceedingly advantageous in theaters since it not only renders them more sanitary but enables people to pass more easily into and out of the chairs or seats.

With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of one embodiment of the invention in the form of a combined school desk and folding seat chair; Fig. 2 is a rear elevation of the same; Fig. 3 is a vertical transverse section; Fig. 4 is a perspective view of the under face of the base; Fig. 5 is a detail perspective of one of the seat carrying bars; Fig. 6 is a horizontal section taken on the plane indicated by the line 6—6 in Fig. 3; Fig. 7 is a detail perspective of the locking wedge or block; Fig. 8 is a detail section taken on the plane indicated by the line 8—8 in Fig. 2; and Fig. 9 is a detail sectional view through the seat showing one of its rubber cushions or bumpers.

The invention comprises a metal frame 1 preferably constructed of angle iron or steel or of bars of T-shape, U-shape or other standard cross sectional form. As illus-

trated, said frame is constructed of two angle metal bars 2, the lower portions of which are brought together to provide a single standard 3 and are suitably united to a supporting and attaching base 4. The intermediate portions of the bars 2 are bent or curved outwardly, as shown at 5, and then bent to provide spaced parallel portions 6 to which a seat back 7 of wood or other suitable material is secured by screws 8 or equivalent fastening means. Said back 7 is preferably curved, as shown more clearly in Figs. 1 and 3, to fit the back of the occupant of the chair and the upright portions 6 of the bars 2 are similarly curved, as is also more clearly shown in said figures. The lower portions of the bars 2 which form the standard 3 preferably incline upwardly and rearwardly from the perpendicular, as shown in Fig. 3, and the preferred manner of uniting them to the base 4 consists in inserting them in a rectangular socket 9 in said base and arranging between them a locking block or wedge 10, as illustrated. Said wedge 9 fits between the channels of the angle bars 2 and its lower extremity is formed with a screw threaded stem 11 to receive a retaining nut 12, which latter bears against the bottom edges of the socket 9 and the lower ends of the bars 2, as seen in Fig. 3. It will be seen that when the nut 12 is tightened the wedge 10 will be drawn down into the socket 9 to tightly bind the bars 2 therein. The base 4 may be a one piece malleable iron casting or a pressed steel plate and it is preferably cone-shaped, as illustrated, so as to provide a space within for the socket 9, which latter, it will be noted, is angularly disposed to correspond with the inclination of the standard 3. The surrounding flange of the base plate 4 may be apertured, as shown at 13 in Fig. 1, to receive screws or other fastenings for retaining it upon the floor.

14 denotes a seat constructed of wood or other suitable material and preferably curved, as shown in Figs. 1 and 3, so as to be comfortable to the occupant. Said seat is supported by two similarly curved arms 15 to which it is secured by screws or other suitable fastenings 16. Said seat supporting bars 15 are also preferably constructed of angle metal and their inner extremities have their inwardly projecting flanges cut away and their vertical flanges bent upwardly, as shown at 17 in Fig. 5, at substan-

tially right angles to the body portions of said bars. Said ends 17 engage the outer faces of the portions 6 of the bars 2 and are pivoted to them by pivots 18 preferably in the form of rivets. Cone-shaped spring washers 19 are provided on the pivots 18 so as to frictionally retain the seat supporting arms 15 in any adjusted position and particularly in their upright position indicated in Fig. 3, in which the seat is shown elevated or folded in dotted lines. The angular disposition of the ends 17 of the bars 15 permit the seat to fold close against the back of the chair. For the purpose of preventing noise when the seat is lowered, cushions or bumpers 20 are provided. Said bumpers are preferably in the form of rubber blocks set in sockets in the rear edge of the seat 14 and adapted to strike against the bars 2 when the seat is lowered.

The above described chair may be used in a school room, theater, opera house or other public place where such chairs or seats are arranged close together in rows and its peculiar construction permits the floor around and between the seats to be readily cleaned and also permits of a wide passage between the seats when they are folded. When, however, the seats are to be used in a school room where desks are also needed the upper extremities of the bars 2 above the seat back supporting portions 6, are bent rearwardly and downwardly to provide parallel inclined portions 21 for supporting a desk top 22. To permit the angle bars 2 to be bent angularly at the points 23 their rearwardly extending flanges are formed with a V-shaped notch, as will be readily understood upon reference to Fig. 3.

24 denotes a desk bottom having its ends secured to supporting bars 25 preferably of angular metal and of angular shape, their horizontal portions 26 having the ends of the desk bottom 4 set in and secured to them by suitable fastenings and their upwardly projecting or vertical portions 27 being secured to the depending flanges of the desk top supporting ends 21 of the bars 2. The ends or sides of the desk may be suitably closed if desired but they are preferably left open and partially closed by crossed or diagonal braces 28 secured by rivets or similar fastenings 29 to the bars 2, 25, some of which fastenings 29 also serving to unite said bars 2, 25 to each other, as shown in Fig. 3 of the drawings.

From the foregoing it will be seen that the invention provides an exceedingly simple device which is composed of few parts that are strong, durable and inexpensive to manufacture and assemble, and that it is neat in design and occupies but little space.

While the preferred embodiment of the invention has been shown and described in detail it will be understood that various

changes in the form, proportion, arrangement and details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described the invention what is claimed is:

1. A chair or seat comprising a base, a frame composed of two parts having their lower ends brought together and united to the base to provide a standard and their upper ends spread apart to provide back supporting members, a back attached to the latter and a seat.

2. A chair or seat comprising a base provided with a socket, a frame composed of channeled or angle bars having their lower ends brought together and arranged in said socket and their upper ends spread apart to provide seat back supporting members, a seat back attached to said members, and means for retaining the lower ends of said bars in the socket of the base.

3. A chair or seat comprising a base provided with a socket, a frame composed of channeled or angle bars having their lower ends brought together and arranged in said socket and their upper ends spread apart to provide seat back supporting members, a seat back attached to said members, and a wedge block driven between the portions of the channeled or angle bars within the socket of the base to retain them therein.

4. A chair or seat comprising a base provided with a socket, a frame composed of channeled or angle bars having their lower ends brought together and arranged in said socket and their upper ends spread apart to provide seat back supporting members, a seat back attached to said members, a wedge block inserted in the socket between the portions of said bars therein and provided with a screw threaded stem, and a retaining nut upon said stem.

5. A chair or seat comprising a base, a frame composed of two channeled or angle bars having their lower ends brought together and united to the base to provide a standard and their upper ends spread apart to provide seat back supporting members, a seat back attached to said members and a seat proper carried by said frame.

6. A combined desk and seat comprising a base, a frame consisting of bars having their lower ends brought together to provide a standard and united to said base and their upper ends spread apart to provide seat back supporting members and also bent angularly to provide desk top supporting members, a desk top upon the latter, a seat back uniting said seat back supporting members, a seat bottom and a bottom for said desk.

7. A combined desk and seat comprising a base, a frame consisting of bars having their

lower ends brought together to provide a
standard and united to said base and their
upper ends spread apart to provide seat
back supporting members and also bent
5 angularly to provide desk top supporting
members, a desk top upon the latter, a seat
back uniting said seat back supporting mem-
bers, a seat bottom, a desk bottom, angular
angle metal supports for the desk bottom at-
10 tached to said members and diagonal braces

for said members and said desk bottom sup-
port and adapted to serve as ends or sides
for the desk.

In testimony whereof I hereunto affix my
signature in the presence of two witnesses. 15

HENRY J. SIEMS.

Witnesses:

JOHN STOWELL,
JULIA ABBOTT.