

H. WAKEMAN.  
CHAIRS.

No. 194,389.

Patented Aug. 21, 1877.

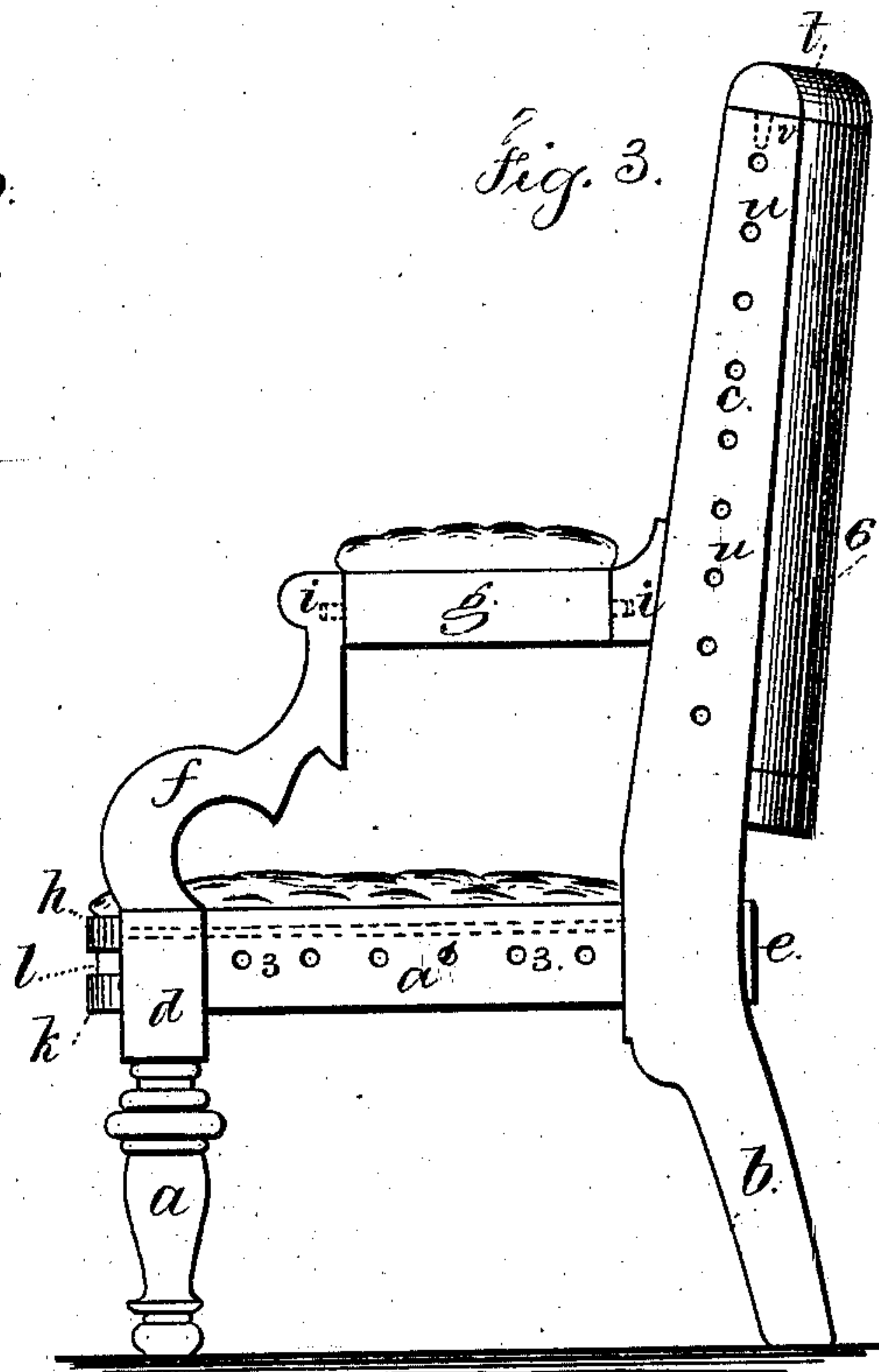
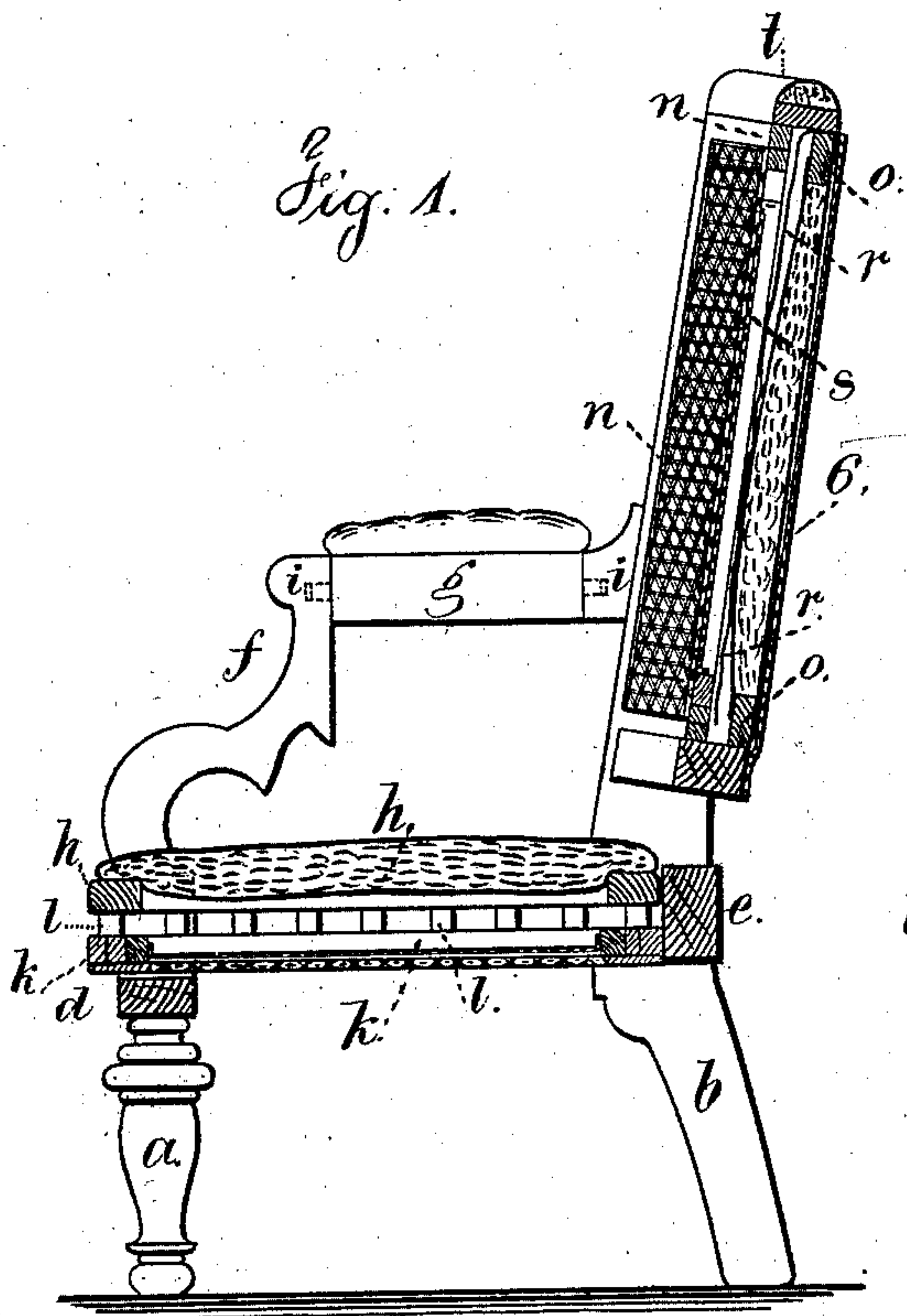
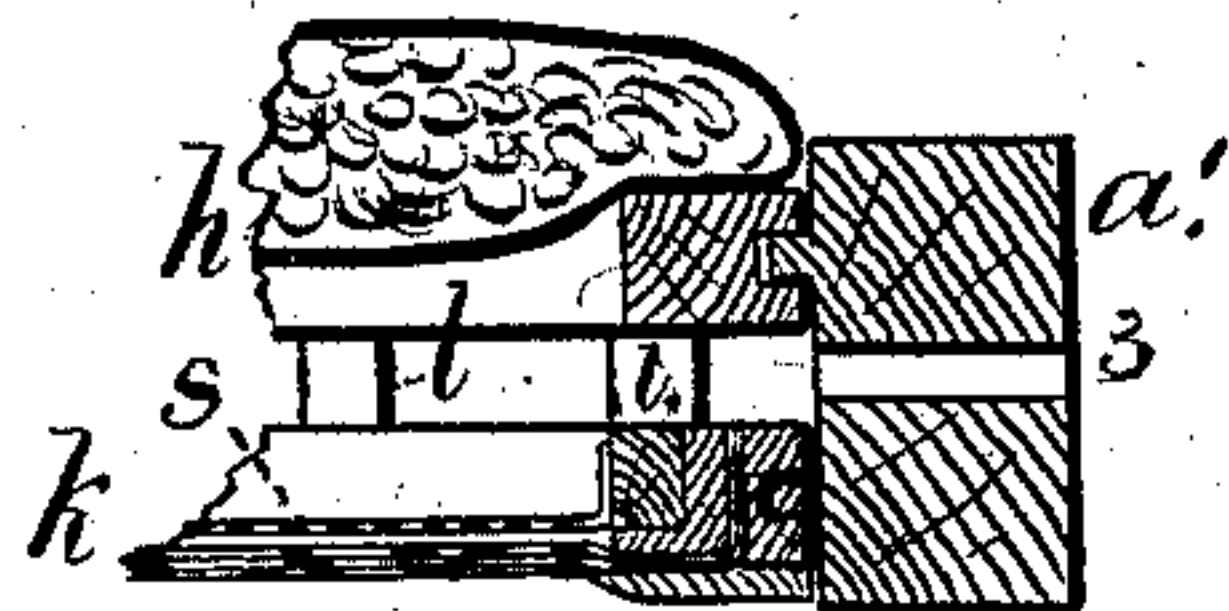


Fig. 2.



Witnesses

Chas H. Smith  
Harold Ferrell.

Inventor

Harwood Wakeman.

per Lemuel W. Ferrell

att'y.



# UNITED STATES PATENT OFFICE.

HARWOOD WAKEMAN, OF NEW YORK, N. Y.

## IMPROVEMENT IN CHAIRS.

Specification forming part of Letters Patent No. 194,389, dated August 21, 1877; application filed May 14, 1877.

*To all whom it may concern:*

Be it known that I, HARWOOD WAKEMAN, of the city and State of New York, have invented an Improvement in Seats, of which the following is a specification:

This invention is for the purpose of strengthening a cane or open-work seat or back, to prevent it breaking under ordinary circumstance of use; also, for allowing an upholstered surface to be substituted for the cane or open-work, and for protecting that upholstered surface from dust, moth, &c., when not in use.

In the drawing, Fig. 1 is a vertical section of the chair complete. Fig. 2 is a section, in larger size, of part of the frame and cane, and Fig. 3 is an elevation of the chair.

The chair or seat frame is composed of the front legs *a*, back legs *b*, and posts or back frame *c*, and rails or side pieces *a'*. There are also suitable cross connecting-pieces, such as at *d e*. Arms are also shown, as at *f*, and the rest portions *g* of the arms are made with wood at one side, and upholstered at the other side, and they are sustained at the ends by pivots *i*, upon which they can be revolved to bring either side uppermost, as desired by the user, and a spring latch or pin upon each arm is employed to hold the rest portion when in its proper position.

The seat is made of frames *h k*, that have spindles or studs *l* between them, so that there are openings all around the seat for the free admission of air to ventilate the seat and prevent dust accumulating therein. The frame *h* is upholstered, and the frame *k* made with cane or similar open-work, and the edges of the frames *h k* are grooved, and there are ribs or supports upon the side pieces *a'*, so that the seat can be slipped into place between the side frames, and in so doing either side may be uppermost, as may be desired.

The openings at 3 in the side pieces *a'* of the chair-frame allow air to reach the space between the two frames *h k* in cases where the upper frame is on the same level, or nearly so, as the top of the side pieces *a'*.

The inside opposite faces of the posts *c c* are provided with ribs for receiving the vertically-sliding frames *n o*, that are interchangeable, so that either can be placed at the front and

the other at the back. The frame *o* is upholstered, and the frame *n* caned or made of open-work, and there is a movable flap or cover, *r*, attached at the top of the upholstering, that hangs down in front thereof, to protect it from dust or moth when the cane or open-work is in front of it; but when the frame and upholstering are brought to the front this flap is folded over and hangs down at the back of the frame *o*, between that and the cane or open-work.

The cane or open-work is liable to be broken by persons standing upon the seats or placing articles against the back. This is especially the case in railway-cars and public places. I therefore employ a foundation of wire-work, as shown at *s*, that is firmly connected at the ends, and is of sufficient strength to support the weight upon the seat or back. Thereby the cane only becomes an intervening layer to prevent disagreeable contact with the metal open-work, and to maintain the proper ornamental appearance of the seat. This wire foundation is preferably in the form of wire netting, and the wires are least noticeable when the meshes of the netting correspond to the meshes of the cane. I have found it the most convenient to stretch the wire foundation upon a frame that is applied inside the wooden frame for the cane, pressed up against the under side of the cane, and secured in its place. There is a movable cap-piece, *t*, to the top of the back. It also forms a head-rest, and is, by preference, upholstered. Dowels *v* at the end of this cap-piece enter vertical holes at the tops of the posts, so as to retain the cap-piece in position, but allow of the removal for changing the positions of the frames *n* and *o*. There are holes at *u*, through the posts *c*, to allow air to circulate freely between one frame and the other, and thus ventilate the chair-back.

At the back of the chair there is a backing-piece or covering at 6, that serves to inclose the movable frames and prevent any unsightly appearance at the back of the chair. This backing-piece or covering from post to post of the seat-back may be made of wood, upholstering, or other suitable material, and may form a permanent back of the seat.

The upholstered surface may be applied to

this backing, so as to dispense with the movable frame *o*, and in that case the movable frame containing the cane will be placed in front or removed therefrom.

I claim as my invention—

1. The seat-bottom made of frames connected together, and with spindles or studs between them, in combination with the seat-frame adapted to support said seat-bottom with either side uppermost, substantially as set forth.

2. The combination, with a seat or back of woven cane or open-work, of a foundation of wire-work secured to the frame, so as to lie directly beneath and support the cane, substantially as set forth.

3. The removable head-rest *t*, having an upholstered surface and cap-piece *t*, provided with dowels to connect the same to the posts *c*, in combination with the said posts *c* and re-

movable frames *n* and *o*, substantially as set forth.

4. The seat or back frame made with openings in the side pieces thereof, in combination with the movable frames, substantially as set forth.

5. The chair provided with a permanent backing, 6, and also a frame containing cane or open-work that is removable from the frame of the chair-back, substantially as set forth.

6. The arm-pieces of the chair, made to revolve upon a longitudinal axis, and upholstered at one side, substantially as set forth.

Signed by me this 11th day of May, A. D. 1877.

HARWOOD WAKEMAN.

Witnesses:

GEO. T. PINCKNEY,  
HAROLD SERRELL.