

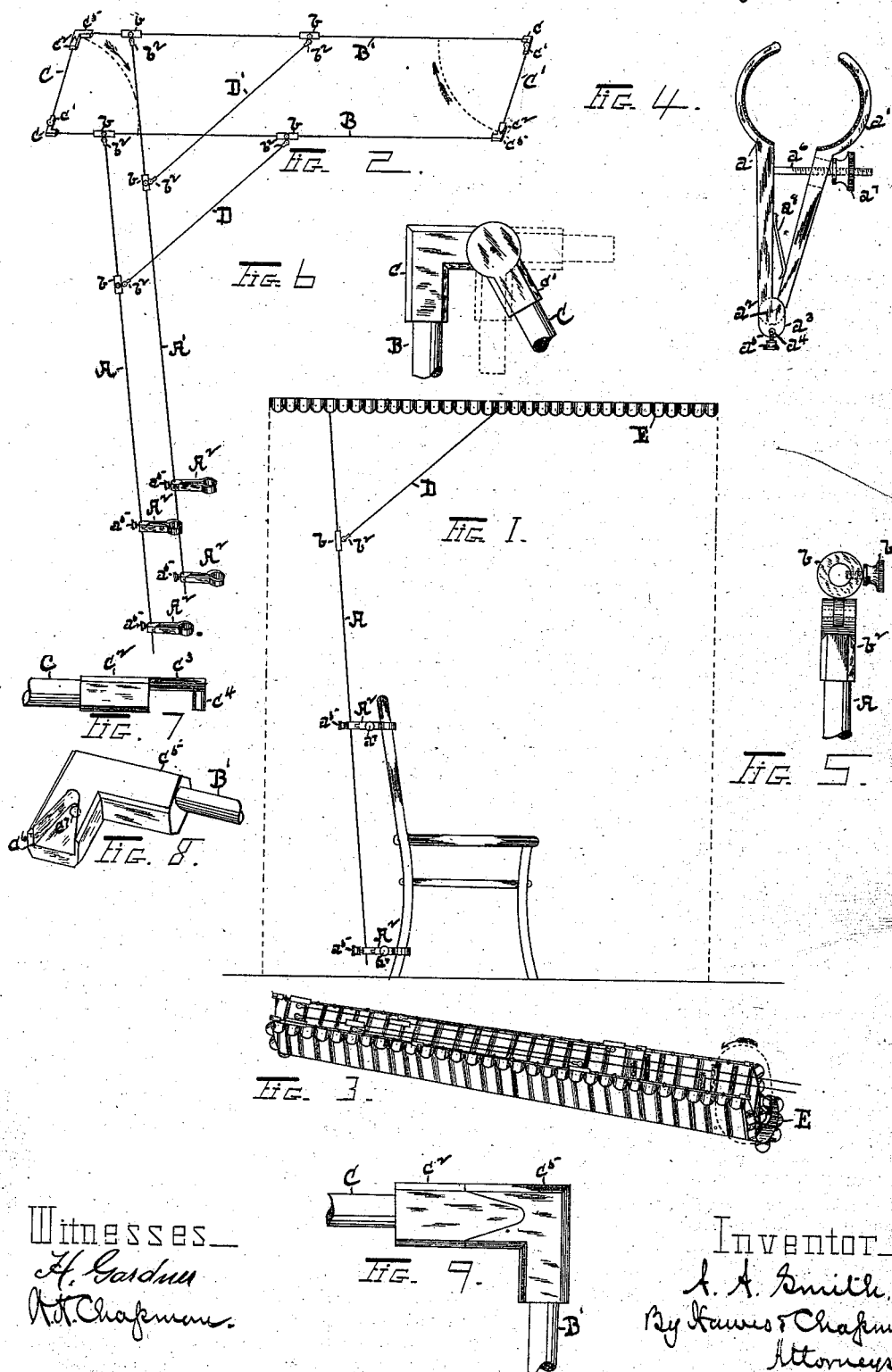
(No Model.)

A. A. SMITH.

CANOPY ATTACHMENT FOR CHAIRS, &c.

No. 382,493.

Patented May 8, 1888.



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UNITED STATES PATENT OFFICE.

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CANOPY ATTACHMENT FOR CHAIRS, &c.

SPECIFICATION forming part of Letters Patent No. 382,493, dated May 8, 1888.

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To all whom it may concern:

Be it known that I, ALMIRA A. SMITH, of Hadley, in the county of Hampshire and Commonwealth of Massachusetts, have invented a new and useful Canopy Attachment for Chairs, &c., of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

The object of my invention is to provide a frame supporting an awning, or a canopy of mosquito-netting, or both, which frame can be easily and quickly secured to and detached from a chair, settee, &c., and which, when detached, can be folded into compact form and readily carried in the hand of the user.

To this end my invention consists in the device constructed as hereinafter fully described, and particularly pointed out in the claims.

Referring to the drawings, in which like letters designate like parts in the several figures, Figure 1 is a side elevation of the frame as attached to a chair when in use, the position of the mosquito-netting being shown by broken lines. Fig. 2 is a view in perspective of the frame as set up before the awning or mosquito-netting is applied thereto. Fig. 3 is a similar view of the frame partially folded to illustrate the manner in which it is prepared for transportation. Figs. 4 to 9, inclusive, are views in detail of parts herein-after described.

The frame proper is composed of two standards, A A', two side pieces, B B', two end pieces, C C', and two braces, D D', which may be made of wood, but which I prefer to make of metallic rods, the surface of which is nickeled. The standards A A' are adapted to be detachably secured to a chair or settee by means of clamps A², one of which is shown in detail in Fig. 4, consisting of two curved jaws, a a', the shanks of which are connected by a pivot, a². The shank of jaw a terminates in a hub, a³, through which is drilled a hole, a⁴, to receive one of the standards A A', and a set screw, a⁵, which passes laterally through the hub into said hole, enables the clamps to be adjusted vertically upon the standards, and to be firmly secured at any desired points thereon. The shank of jaw a' of said clamp is slotted, as indicated by broken lines in Fig. 4, to receive the screw-threaded pin a⁶, which is rigidly secured to jaw a, and receives at its outer end

nut a', by means of which the jaws are caused to tightly clamp the portion of the chair or settee about which they are placed. A spring, a⁸, serves to spread the jaws when nut a' is turned back upon the pin. I prefer to provide the clamping-faces of the jaws a a' with a facing of leather or similar substance, as shown, to prevent abrasion of the surface of the chair or settee to which they are applied. By the use of this form of clamp the standards can be very quickly and easily attached to and detached from a chair or settee, and when so attached will be firmly held in position.

At their upper ends the standards are secured to the side pieces, B B', by means shown in detail in Fig. 5, consisting of a sleeve, b, having a set-screw, b', whereby it is adapted to be secured in any desired position upon the side piece, B or B', and having connected therewith by means of a hinge joint a cap, b², which receives the end of one of the standards and is secured thereto in any suitable manner. This device also forms the connecting means between the braces D D' and the standards at one end of the former and between said braces at their opposite ends and the side pieces, B B'.

It will be observed that by loosening one of the set-screws b' at either end of said braces the sleeve b is permitted to slide upon the standard or side piece, as the case may be, and that thus the side pieces can be folded to a position parallel with and adjacent to the standards, as shown in Fig. 3.

Each of the end pieces, C C', is hinged to one of the side pieces, and I prefer to make the hinge as shown in detail in Fig. 6, in which c designates a cap to receive and be secured to the end of one of the side pieces, to which is connected by a hinge-joint a similar cap, c', which is secured to the end of one of the end pieces. At its opposite end each of said end pieces is provided with a cap, c², (see Fig. 7,) having a substantially V-shaped projection, c³, of about one-half the thickness of the body of the cap, said projection having at its outer end a downwardly-extending lug or pin, c⁴, and the adjacent end of each side piece is provided with a cap, c⁵, (see Fig. 8,) having in its upper face a depression, c⁶, corresponding in thickness and outline with projection c³, and having at the inner end of said depression an orifice, c⁷, to receive the lug or pin c⁴. By ap-

plying cap c^2 to cap c^5 , with the projection and lug of the former occupying the depression and orifice of the latter, the free ends of the side and end pieces are connected together in such manner as to prevent lateral play between them, while at the same time a smooth and unbroken joint is formed, as shown in Fig. 9. The connection can be instantly broken and the end pieces folded back against the side pieces, as indicated by the arrows in Fig. 2.

An awning-cloth, E, which may be made from water-proof material, if desired, is secured near its edges to the side pieces of the frame by means of rings, or in any convenient manner. I also prefer, when the frame is to be used in localities infested with mosquitos, to suspend a mosquito-netting from said side pieces in such manner as to wholly inclose the chair, as indicated by the broken line in Fig. 1. When the frame is folded, as shown in Fig. 3, the awning-cloth and mosquito-netting, when the latter is used, are wound around the frame, as indicated by the broken line and arrow in said figure, thus making a compact article, which can be easily carried in the hand of the user, but which can be very quickly and conveniently set up by applying clamps A^2 to the chair or settee, sliding the free ends of braces $D D'$ upon the standards or side pieces, as the case may be, to bring the side pieces into a substantially horizontal position, and securing said free ends in place by means of the set-screws b' , and, finally, applying the caps c^2 on the free ends of the end pieces to the caps c^5 on the side pieces. The removal of the frame from the chair is performed with equal facility.

It will be observed that the adjustable connection between the braces $D D'$ and the standards at one end and the side pieces at the opposite end permits the side and end pieces to be set at any desired angle to the standards, and consequently, however much the standards may be inclined, owing to the various inclinations of the chairs or settees to which they may be applied, the awning can always be set in a horizontal plane. Moreover, the same adjustability of the braces permits the awning to be set at any desired inclination, forward or backward, with respect to the chair when desirable, in order to more effectually shelter the occupant of the chair from the sun's rays.

The awning and mosquito-netting attachment for chairs thus described is especially applicable for use during the summer season, at the sea-shore, and in the mountains, inasmuch as it can be so easily transported from place to place, and can be so quickly set up wherever its use may be desirable.

I do not wish to limit myself to the construction shown and described in all of its various details, as it is obvious that modifications

therein can be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein described canopy attachment, consisting of the combination of the standards $A A'$, the side pieces, $B B'$, the end pieces, CC' , the braces DD' , having sliding and hinged connections with the said standards, and side pieces and clamps for securing said standards to a chair or settee, each of said end pieces having a hinged connection with one of said side pieces and a detachable connection with the other thereof, whereby the said end and side pieces and standards are all adapted to be folded to positions parallel with and adjacent to each other, substantially as set forth.

2. The combination, with the standards $A A'$, supporting the awning-frame, of the clamps A^2 , adjustably secured to the said standards, each of said clamps having a hole and set-screw for attachment to its standard, and consisting of two curved grasping jaws having shanks which are pivotally connected at their rear ends, a threaded bolt projecting from the shank of one of said jaws through a slot in the shank of the other jaw, a nut on said bolt, and a spring for separating said jaws, substantially as set forth.

3. The combination, with the standards $A A'$ and the side pieces, $B B'$, of the sleeves b , fitted to slide on said standards and side pieces, set-screws b' for securing said sleeves in place, and the braces DD' , provided with the caps b^2 , hinged to the said sleeves, substantially as set forth.

4. The combination, with standards $A A'$ and side pieces, $B B'$, each of said side pieces being provided at one end with a cap, c^5 , having depression c^6 and orifice c^7 , of end pieces, CC' , connected by a hinge to said side pieces at the end opposite to said caps c^5 , each of said end pieces being provided at its free end with a cap, c^2 , having the projection c^3 , and lug or pin c^4 , arranged and operating substantially as and for the purpose set forth.

5. As an article of manufacture, the canopy attachment for chairs herein described, consisting of the side pieces, $B B'$, having an awning cloth and a mosquito-guard attached thereto, substantially in the manner described, end pieces, CC' , standards $A A'$, suitable braces having hinged and sliding connections with said standards and side pieces, and clamps A^2 , adjustably secured to said standards, arranged and operating substantially as set forth.

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