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COMBINED COLLAPSIBLE CHAIR AND BAG.
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3 SHEETS-SHEET 1.

Fig. 1.

Fig. 2.

Witnesses:
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COLUMBIA PHOTOGRAPH CO., WASHINGTON, D.C.
To all whom it may concern:

Be it known that I, JOSEPH MATHIAS ARNOLD, a citizen of the French Republic, and residing at Brussels-Kockelberg, Belgium, have invented new and useful Improvements in a Combined Collapsible Chair and Bag; and I do hereby declare the following to be a full, clear, and exact description of the same.

The invention relates to collapsible or outdoor chairs or seats composed of two rectangular frames pivotally connected together and a band of cloth forming the seat and back. The collapsible chairs or seats of this kind heretofore known take very much space when collapsed; they can scarcely or not at all be lodged in train cars, cars and the like and form cumbersome luggage traveling.

The present collapsible chair or seat is characterized by the fact that the two frames of the chair are each formed of two parts hinged together and held in operative position on one hand by a pair of supporting arms capable of being moved vertically on the back of the chair and collapsed into the same, and on the other hand by a second pair of supporting arms pivotally connected at the front-end of the seat-frame and capable of being temporarily fastened to the lower end of the back-frame, one end of the band of cloth being free and capable of being hooked in notches or the like of the back-frame and placing itself automatically against the upper cross-bar of said back-frame when the end of the cloth is disengaged from the notches, for the purpose of adapting the various parts of the chair to be collapsed so as to form a flat bag when collapsed.

The subject of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 shows the side elevation of the collapsed chair in operative position. Fig. 2 shows the side elevation of the chair arranged for upright sitting or ready to be collapsed. Fig. 3 is the bottom plan view of the chair collapsed flat upon the floor and forming an open bag. Fig. 4 is a side elevation of same. Fig. 5 is a perspective view of the bag formed of the collapsed chair. Fig. 6 shows a portion of the guiding slot for a supporting arm of the bag, and Fig. 7 is a longitudinal section of the upper part of the chair. Fig. 8 shows detail views of a device for locking the hinges of the frames.

The two rectangular frames 1, 2 and 3, 4 of the chair are pivotally connected together in the well-known way by pivot-pins 50 and 5 and are capable of being turned on the latter to place themselves side by side. According to this invention, both frames are composed of two parts 1 and 2 or 3 and 4 respectively. The parts 1, 2 are secured by cross-bars 6, 7 respectively and hinged together by hinges 8, each of which is formed with two metal strips 8' secured to the sides of the parts 1, 2. The parts 3, 4 of the second frame are hinged together by pivot-pins 9.

In order to prevent the frame-portsions 1, 2 from collapsing or turning around the hinges 8 while the chair is being set up for use, said hinges 8 are provided with any suitable locking device, preferably formed of two spring-blades 27, 27 embedded and secured in the bars 1, 2 and provided with cooperating locking projections 28. When the parts 1, 2 are uncollapsed and aligned, the projections 28 engage each other for securing sufficient rigidity to the frame 1, 2, while the chair is set up for use. The hinges 8 may of course be locked by any other device, without departing from the scope of the invention.

The band of cloth 10 forming the seat and back of the chair is fastened in the usual way to the frontal cross-bar 11 of the frame 3, 4; said band of cloth extends through a slot provided between the upper cross-bar 7 of the frame 1, 2 and a second cross-bar 7' and carries at its free end a rod 13 adapted to be adjusted in notches 19 of the frame part 2 and retained below said slot when the chair is collapsed. By this arrangement the band of cloth which must be long enough to form the bottom, cover and lateral walls of the bag, may be shortened as desired to form the chair shown in Fig. 1. A third supporting frame formed of two arms 13 connected by two cross-bars 26, 26' is provided with metal strips 16 having a longitudinal slot, the upper end of which is in the shape of a hook (Fig. 6) and which is in line with a groove provided in the arms 13. Extending into the slot of each supporting-arm 13 is a pin 17 projecting from the inner side of the frame-part 2. When the chair is in use the arms 13 serve...
to support the frame 1, 2 (Fig. 1) and are held in place by notches in the frame-part 4 as well as by the pins 17 engaging the hooked ends of their slots.

Secured on the outer side faces of the arms 13 are projecting pins 13' adapted to engage corresponding bayonet-grooves 13'' provided on the inner side faces of the bars 2 of the frame 1, 2. Owing to these arrangements, the frame 13, 26, 26' after being turned in the direction of the arrow a (Fig. 2), may be easily brought into the frame 1, 2 and parallel to the same, as the bottom of the transverse portion of the bayonet-groove 13'' prevents the frame 13, 26, 26' from being moved beyond the desired position; owing to said arrangements the frame 13, 26, 26' is moreover held in its parallel position when it is moved upwardly within the portion 2 of the frame 1, 2.

The frame 13, 26, 26' is held in its upper position within the portion 2 by means of semi-spherical projections 16' secured to the inner face of each bar 2 of the frame 1, 2 in such manner that, when the ends of the metal strips 16 engage said projections, they are first bent inwardly whereupon said projections snap into the hooked portions of the slots of said metal strips. The front end of the frame 3, 4 is supported by arms 18 pivotally connected to the same by pivot-pins 19, and the free end of which has one or several holes 20, adapted to be engaged by a pin 21 secured to the small block 22 on the inner side of the frame-part 1 (Fig. 1).

For uncollapsing the chair, the bag (Fig. 5) is raised, the fingers of the left hand being placed below the bar 7; said bag is then opened so that the portion 1 of the frame 1, 2 bends freely downwardly, whereupon said frame is placed vertically upon the ground, floor, deck or the like and held in this position by the left hand, while the right hand uncollapses the inner frame 3, 4. Now the supporting frame 13, 26, 26' is moved downwardly and engaged into the desired notches of the frame-part 4, and the front supporting arms are also connected to the pins 21 by means of their notches 20. The band of cloth 10 being then fastened as described, the chair will be ready for use.

For collapsing the chair into the shape of a bag, the front arms 18 are first disengaged, the inner frame 3, 4 is then placed vertically and held by the left hand; the band of cloth 10 is then disengaged, the frame 13, 26, 26' raised into the frame-portion 2 and the inner frame 3, 4 collapsed to the position shown in Fig. 3, and forms an open bag, which may be readily filled with any articles and then closed like an ordinary bag. The height of this bag is equal to half the length of a frame of the chair. Said bag may be easily transported by means of handles a secured to the frame-bars 1, 9 (Figs. 4 and 5).

It will be easily understood that in the present collapsible chair the various parts are adapted to be collapsed into a common plane (the plane of Fig. 3), so that the width of the closed bag is equal to twice the width of a frame-bar and the bag has no projecting parts. The collapsible chair may also be converted to an ordinary seat for up-right sitting. To this end, the supporting frame 13, 26, 26' is placed directly upon the rear ends of the bars 3 (Fig. 2), whereupon the various parts are connected by any desired means i.e. a segment 23 of thin metal sheet secured to the inner side of each frame-bar 3 and provided with a plurality of adjusting holes, adapted to be engaged by a pin 24 secured to the outer side of each frame-bar 4. The same result may be attained by connecting the lower cross-bar of the frame 1, 2 to the rear cross-bar of the frame 3, 4 by means of a strap, cord or the like 29.

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

1. A collapsible chair comprising a rear supporting frame, the combination with two rectangular frames, pivot-pins connecting the same, each frame being composed of two portions, the two portions of the inner frame being adapted to be folded into one another (see portions 3, 4) means for collapsibly connecting said portions together, a band of cloth fastened at one end to one frame and having its opposite end free; a transverse rod secured to this free end of the cloth and upon which the latter may be wound as desired, means for removably fastening the ends of said transverse rod to the side-bars of the back-frame, a supporting frame, longitudinal slots in the side-bars of said frame, hook-shaped portions at the upper ends of said slots, laterally projecting pins on the side-bars of the outer or back-frame, said pins engaging said slots, a pair of supporting arms pivotally connected to the front end of the inner frame, and means for removably connecting said arms to the lower end of the outer frame, substantially as set forth.

2. In a collapsible chair comprising a rear supporting frame, the combination with two rectangular frames, pivot-pins connecting the same, each frame being composed of two portions, hinges connecting said portions, means for yielding locations said hinges, a band of cloth fastened at one end to one frame and having its opposite end free, a transverse rod secured to this free end of the cloth and upon which the latter may be wound as desired, means for removably fastening the ends of said transverse rod to the
side-bars of the back-frame, a supporting frame formed of two side-bars and lower and intermediate cross-bars, the lower cross-bar of said supporting frame cooperating with the cross-bar (25) of the inner frame to form a rigid side of the bag when collapsed, longitudinal slots in the side bars of the supporting frame, hook-shaped portions at the upper ends of said slots, laterally projecting pins on the side-bars of the outer or back-frame, said pins engaging said slots, laterally projecting pins on the said bars of said supporting frame, bayonet grooves in the side-bars of the outer or back-frame and adapted to be engaged by the pins of the supporting frame for guiding the latter when it is moved within said back-frame, means for temporarily securing the supporting frame within the back-frame, a pair of supporting arms, pivotally connected to the front end of the inner frame, and means for removably connecting said arms to the lower end of the outer frame, substantially as set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH MATHIAS ARNOLD.

Witnesses:
AURLES HOBES,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."