(No Model.) 3 Sheets—Sheet 1.

F. H. PLUMMER.

RECLINING CHAIR.

No. 318,796. Patented May 26, 1885.

Fig. 1.

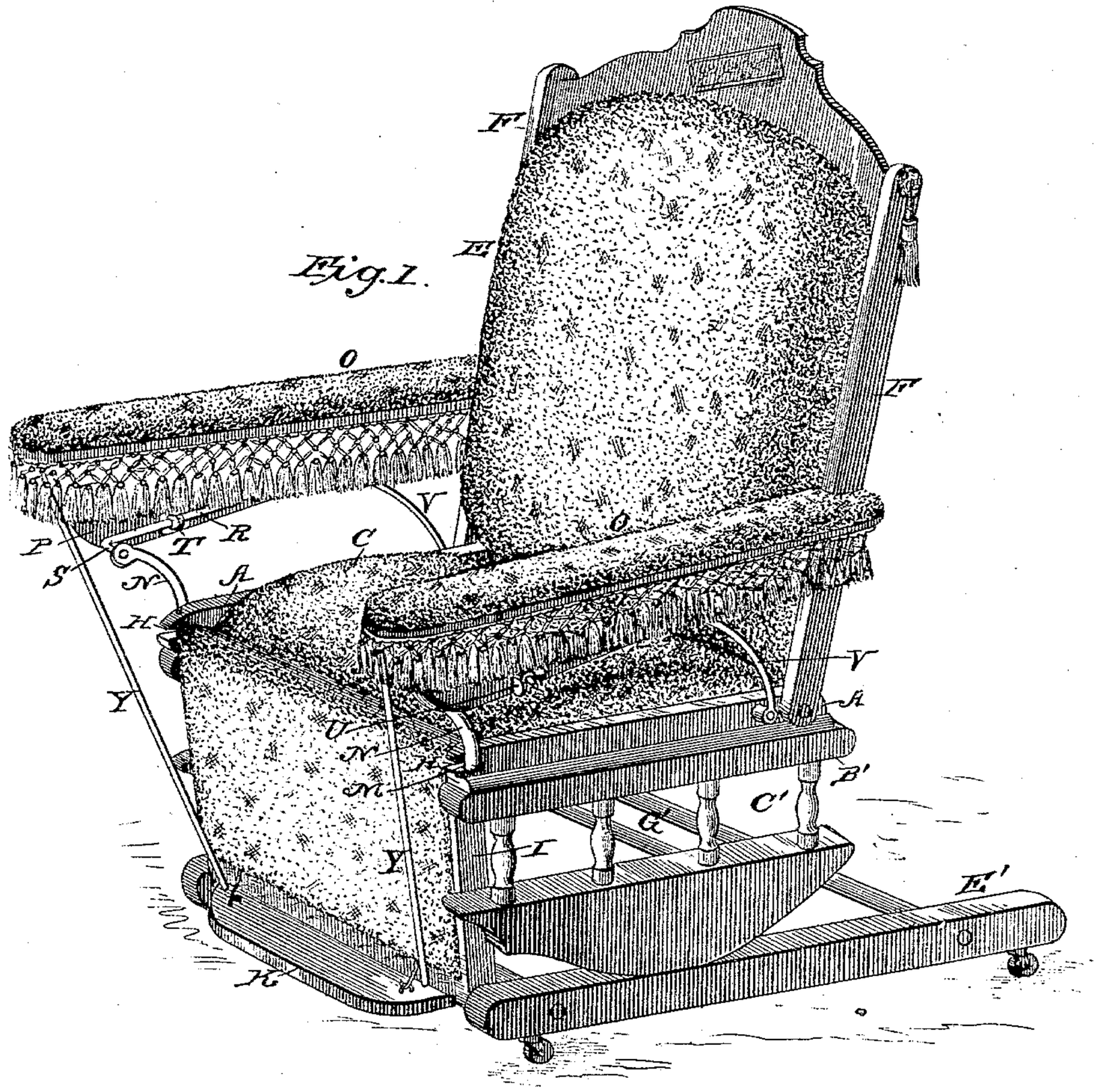


Fig. 6.

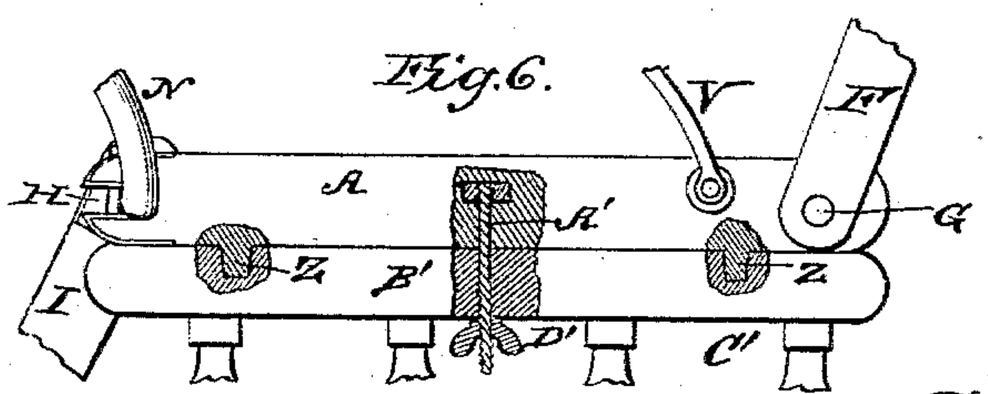
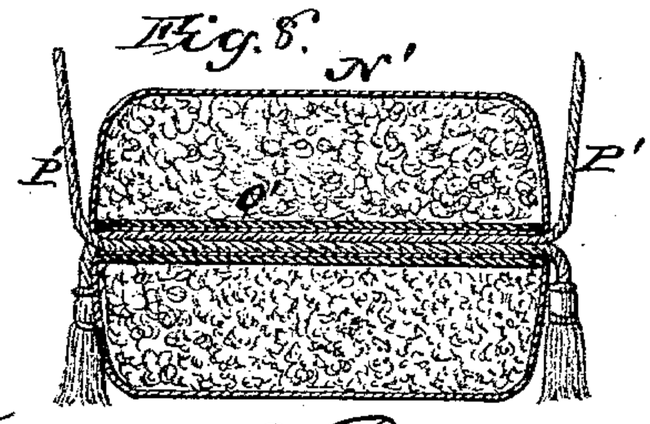


Fig. 8.



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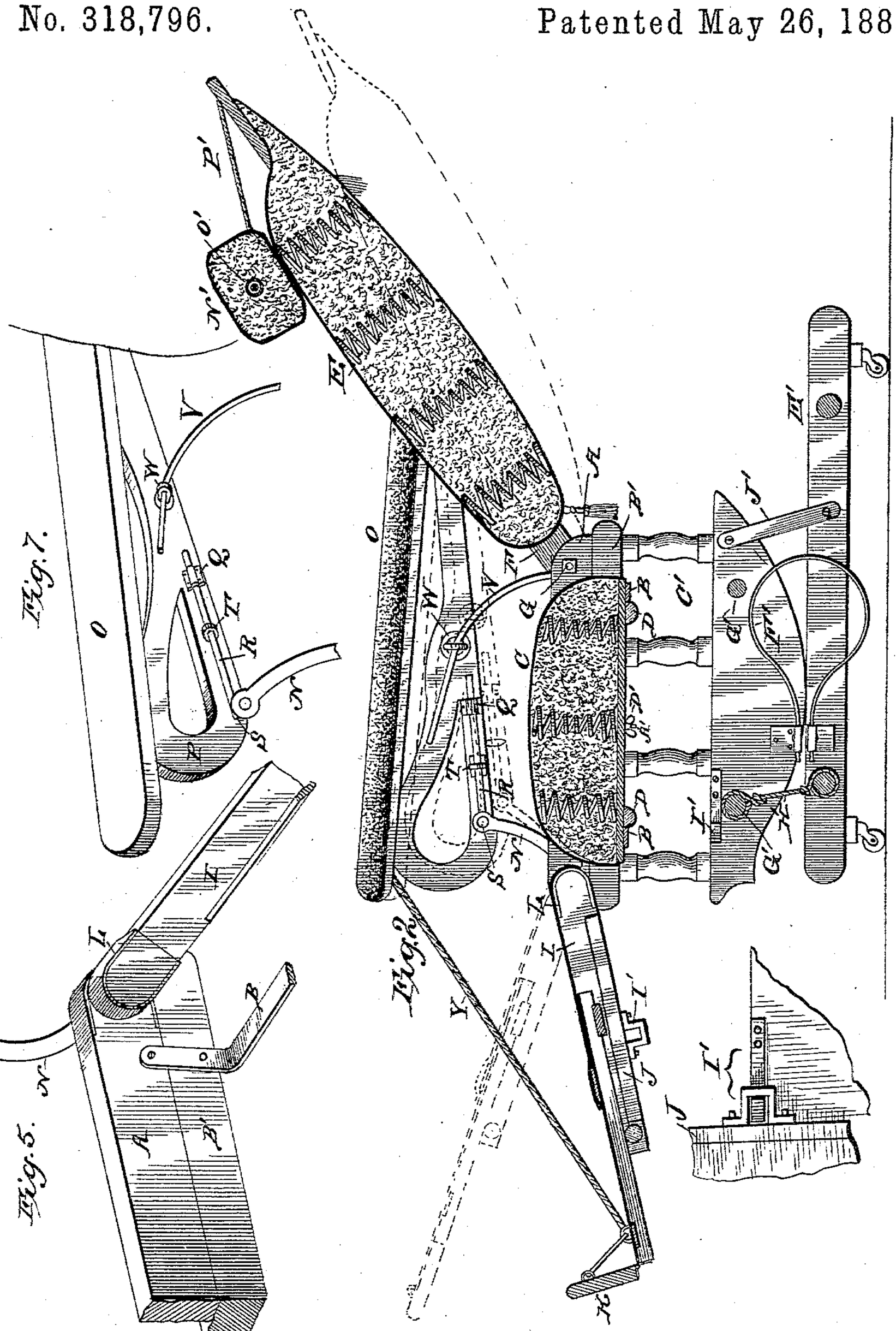
ATTORNEYS.

(No Model.) 3 Sheets—Sheet 2.

F. H. PLUMMER.

RECLINING CHAIR.

No. 318,796. Patented May 26, 1885.



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(No Model.)

3 Sheets—Sheet 3.

F. H. PLUMMER.

RECLINING CHAIR.

No. 318,796. Patented May 26, 1885.

Fig. 3.

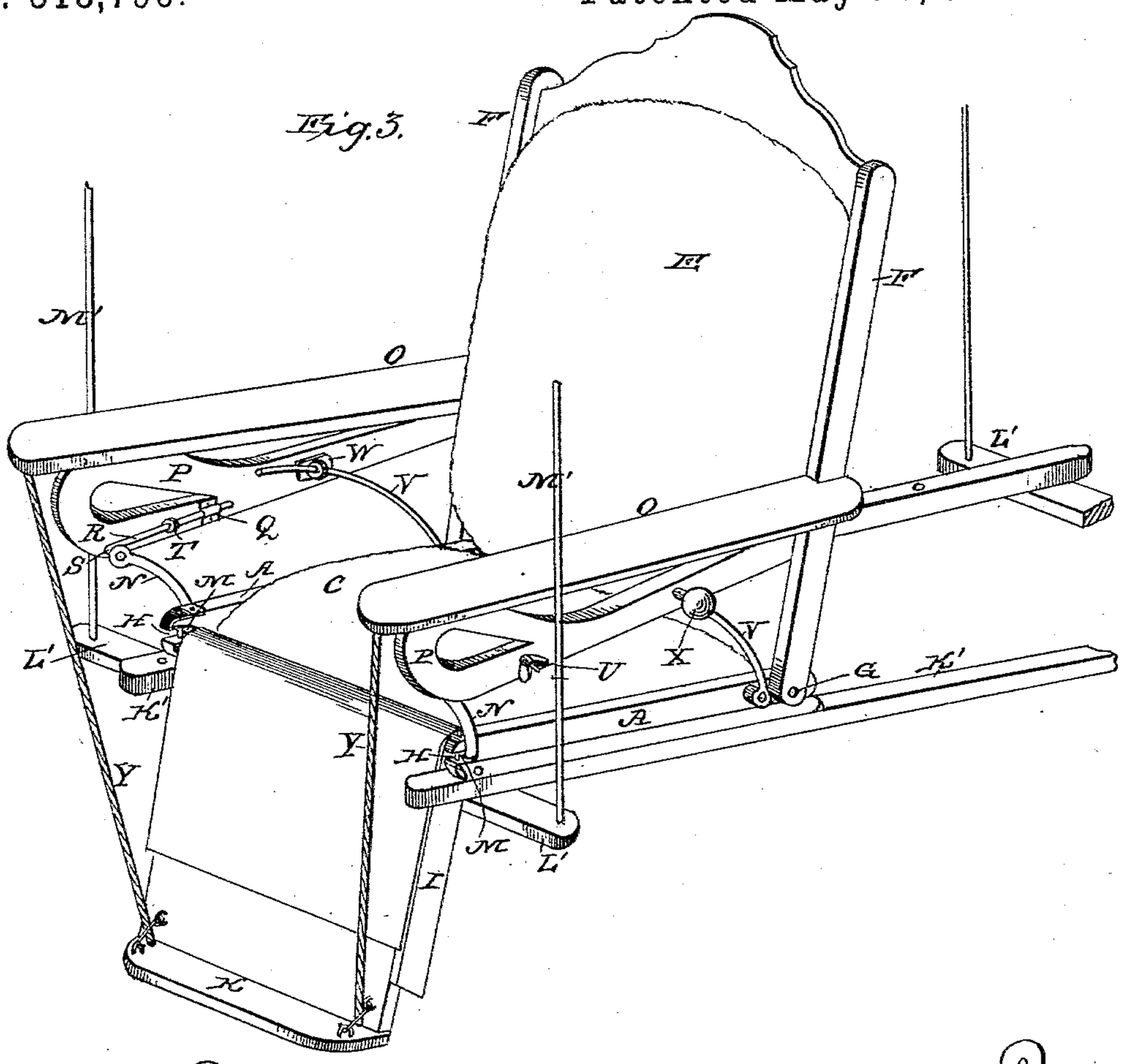
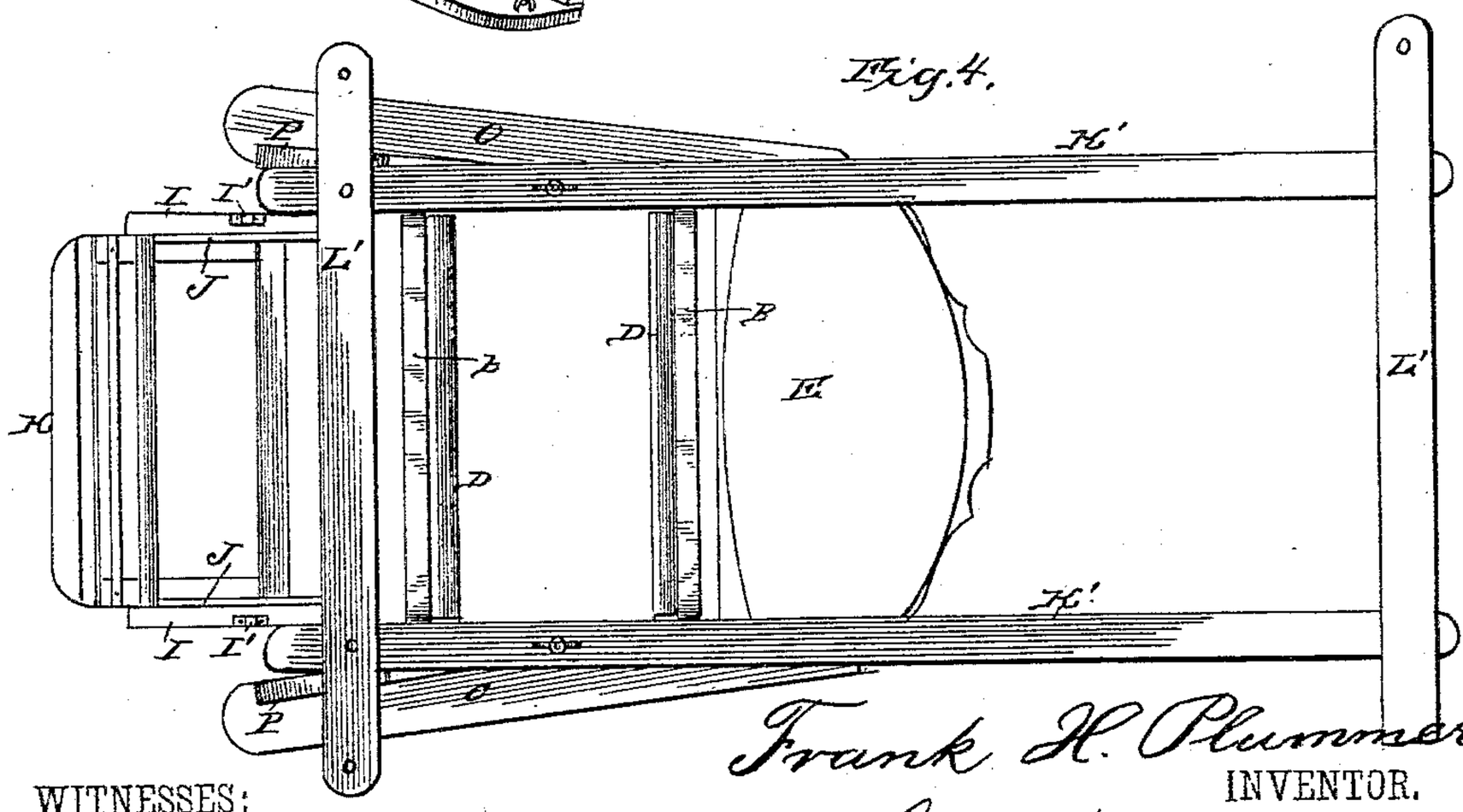


Fig. 4.



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UNITED STATES PATENT OFFICE.

FRANK H. PLUMMER, OF HENNIKER, NEW HAMPSHIRE.

RECLINING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 318,796, dated May 26, 1885.

Application filed February 6, 1885. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. PLUMMER, a citizen of the United States, and a resident of Henniker, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improvements in Reclining-Chairs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved reclining-chair, showing the same with the back raised and in position for use as a parlor-chair. Fig. 2 is a longitudinal vertical sectional view of the same with the back lowered and the leg-rest raised. Fig. 3 is a perspective view of the chair-body detached and arranged for use as a swinging or hammock chair. Fig. 4 is a bottom view of the same. Fig. 5 is a detail perspective view on a larger scale of the leg-rest, illustrating the method of connecting the latter to the seat-frame, from which the seat has been removed, so as to illustrate its construction. Fig. 6 is a side view of a portion of the chair-frame with parts broken away, so as to illustrate the construction more clearly. Fig. 7 is a detail view in perspective on a larger scale of one of the arm-rests with its connections; and Fig. 8 is a transverse sectional view of the head-rest used in connection with my improved reclining-chair.

The same letters refer to the same parts in all the figures.

This invention relates to reclining-chairs of that class in which the back-frame and a leg-rest are hinged or pivoted, respectively, at the rear and front ends of a seat-frame, and connected pivotally by means of the arm-rests, so that when the back is lowered the leg-rest shall be automatically raised, and vice versa; and it has for its object to produce a chair of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency, which shall be convertible at will into a rocking, a reclining, or a swinging or hammock chair, so as to combine in one the advantages of them all, and which shall be so constructed as to be readily dismembered and packed in a small space for storage or shipment.

With these ends in view the invention consists in the improved construction and arrangement of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A A designate the side rails of the seat-frame, which are connected by means of transverse metal straps B B, adapted to support the seat C, which is to be suitably constructed and upholstered and provided on its under side with transverse cleats D D, fitting between the straps B B, so as to retain the seat in position when adjusted, and prevent it from sliding in a forward or rearward direction.

E designates the back of the chair, the frame of which is suitably constructed and upholstered. The side rails, F F, of the back-frame are hinged or pivoted to the outer sides of the seat-rails A A, at the rear ends of the latter, by means of bolts G G, allowing the said back-frame to swing between a vertical and an approximately horizontal position.

The front ends of the side rails, A A, of the seat-frame are provided with slots H H, which may be lined with metal, and which form bearings for the pivots of the leg-rest. The latter consists of a suitable frame, the side rails of which, I I, are provided on their inner sides with cleats J J, supporting a sliding extension-frame and foot-rest, K, the construction and operation of which need not be herein described in detail, it having been shown and claimed in another application. The upper ends of the side rails, I I, are provided with metallic sockets L L, provided with laterally-extending pivots M M, having their bearings in the slots H H, and provided at their outer ends with forwardly and upwardly and forwardly extending curved arms or levers N N.

O O designate the arm-rests, the rear ends of which are pivoted to the side rails, F F, of the back, and the under sides of which are provided with downwardly and forwardly extending scrolls P P. To the inner sides of the latter, near their lower edges, are secured sleeves Q Q, forming bearings for the sliding

rods R R, the front ends of which are provided with laterally inward-extending studs S S, by means of which they are pivotally connected with the upper ends of the lever-arms N N, which are provided with perforations to receive the said studs. The rods R may be retained in any position to which they may be adjusted by means of eyebolts T T passing transversely through the scrolls P P, and provided at their outer ends with thumb-nuts U U, by means of which the rods R, which pass through the said eyebolts, may be tightened and held secure. Other means for adjusting and retaining the rods R R may, however, be adopted without departing from the spirit of my invention.

To the outer sides of the seat-rails A A, near their rear ends, are pivoted a pair of forwardly-extending curved rods, V V, passing through eyebolts W W, extending transversely through the scrolls, and provided at their outer ends with thumb-nuts X X, or equivalent devices, by means of which the rods V V may be readily clamped or tightened, so as to retain the back and leg-rest of the chair in any position to which they may be adjusted.

The lower corners of the extension-frame of the leg-rest are connected by means of cords Y Y with the upper front ends of the arm-rests, said cords serving to withdraw the said extension-frame into the leg-rest frame when the latter is lowered.

The operation of the parts of my invention thus far described will be readily understood. It will be observed that the arm-rests form, practically, pivotal connecting-rods between the back frame and the upwardly and forwardly extending lever-arms of the leg-rest, so that when the former is lowered the latter will be raised, and vice versa. It will also be observed that the distance between the fulcra of the lever-arms N N being shorter than the distance between the points at which the arm-rests are pivoted to the side rails of the back-frame and the latter to the seat-rails the leg-rest frame will, owing to the difference in leverage, be raised at a greater rate of speed than the back-frame will be lowered, so that by the time the latter reaches a horizontal position the free end of the former will be raised above the level of the seat. This feature, however, is not herein claimed, being, in part, the subject of another application. An important feature of the present invention, however, are the adjusting-rods R R, by means of which the angle or position of the leg-rest frame with relation to the back may be regulated, and which also serve to regulate the extent to which the back may be tilted, inasmuch as the latter cannot, of course, be tilted beyond a point at which the fulcra of the arms N N and the points at which the arm-rests are pivoted to the back are in a line with each other, and the upper fulcra of said lever-arms being adjustable with the said rods.

The seat-rails A A are provided with downwardly-extending studs Z Z and bolts A′, adapted to enter suitable recesses and perforations in the top rails, B′ B′, of the rocker-frame C′, to which the chair-body may be attached by means of thumb-nuts D′, fitting the bolts A′. The rocker-frame is of the ordinary platform kind, and is mounted upon the platform E′, with which it is connected by means of spring fixtures of suitable construction, as shown at F′. The sides of the rocker-frame are connected detachably by means of the rounds G′ G′, in order that it may be readily taken apart for storage or shipment. The front round of the rocker-frame is connected with one of the rounds of the platform by means of a cord, H′, of suitable length to prevent the chair, when used as a rocker, from tilting back in case the springs should give way. When the chair is used as a rocker, the leg-rest is connected with the rocker-frame by means of suitable catches, I′, (illustrated in detail in the small figure under Fig. 2, and also shown on the said figure,) which are adapted to engage or interlock with each other, and which prevent it from swinging out and interfering with the rocking, or the chair may be used as a rocker while extended for a reclining posture. When it is desired to use the chair as a reclining chair only, the rocker-frame is connected with the platform by means of hooks or braces J′, which will prevent it from rocking.

When it is desired to convert the chair into a swinging or hammock chair, the thumb-nuts D′ are removed and the chair-body lifted off the rocker-frame. A pair of longitudinal bars, K′ K′, having perforations to receive the studs Z and bolts A′ are then placed in position and secured by means of the thumb-nuts D′. The front and rear ends of the bars K′ K′ are connected by cross-bars L′, to the projecting ends of which the suspending ropes or cords M′ are attached.

From the foreging description, taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood. The general construction is simple, but of such a nature that, while the chair may be manufactured at a reasonable expense, it admits of being made as ornamental and luxurious as may be desired. As a reclining-chair, the positions to which it may be adjusted are numerous and comfortable, and it may easily and quickly be converted into a handsome parlor or easy chair, a rocker, or a swinging or hammock chair.

My improved chair is provided with a head-rest, N′, consisting of a cushion of suitable shape, through the center of which runs a tube, O′, of cloth, rubber, or other suitable material or combination of materials. Running through said tube in opposite directions are a pair of cords, P′ P′, each provided at one end with a stop or tassel, and having its other end attached to the top of the back-frame. The said cords retain the cushion or head-rest by friction at any position to which it may be adjusted, and it will be seen that by

simply pulling the projecting ends of the cords in opposite directions the cushion may be raised, while by simply pressing it in a downward direction it may be lowered. When it is not desired to use the head-rest, it may be swung over in rear of the back of the chair.

It is obvious that in the manufacture of this invention it may be found desirable to adopt various changes in the construction and arrangement of details. I would therefore have it understood that I do not limit myself to the precise construction and arrangement of parts herein described, but reserve to myself the right to all such modifications as may be adopted without departing from the spirit of my invention.

In this case I disclaim all matter which has here been shown, but which has been claimed in my application Serial No. 155,068 of even date herewith; and I also disclaim all matter illustrated by the present state of the art.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of the seat-rails having slots at their front ends, the back hinged at the rear ends of the said seat-rails, the leg-rest frame, sockets at the upper ends of the side rails of the latter having laterally-extending studs journaled in the slots of the seat-rails and provided with upwardly and forwardly extending curved lever-arms, and the arm-rests pivoted to the side rails of the back-frame and provided with longitudinally-sliding adjustable rods, the front ends of which have laterally-extending studs journaled in the upper ends of the lever-arms, substantially as herein described, for the purpose set forth.

2. The combination, with the chair-body, constructed substantially as described, and the seat-rails of which are provided with downwardly-extending studs and bolts, of the rocker-frame, the top rails of which are provided with perforations to receive the said studs and bolts, and thumb-nuts fitting the said bolts for securing the chair-body detachably upon the rocker-frame, substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

FRANK H. PLUMMER.

Witnesses:
AUGUST PETERSON,
WM. SECHER.