

D. T. OWEN.
DAVENPORT BED.

APPLICATION FILED JAN. 24, 1910.

988,498.

Patented Apr. 4, 1911.

2 SHEETS—SHEET 1

Fig. 1.

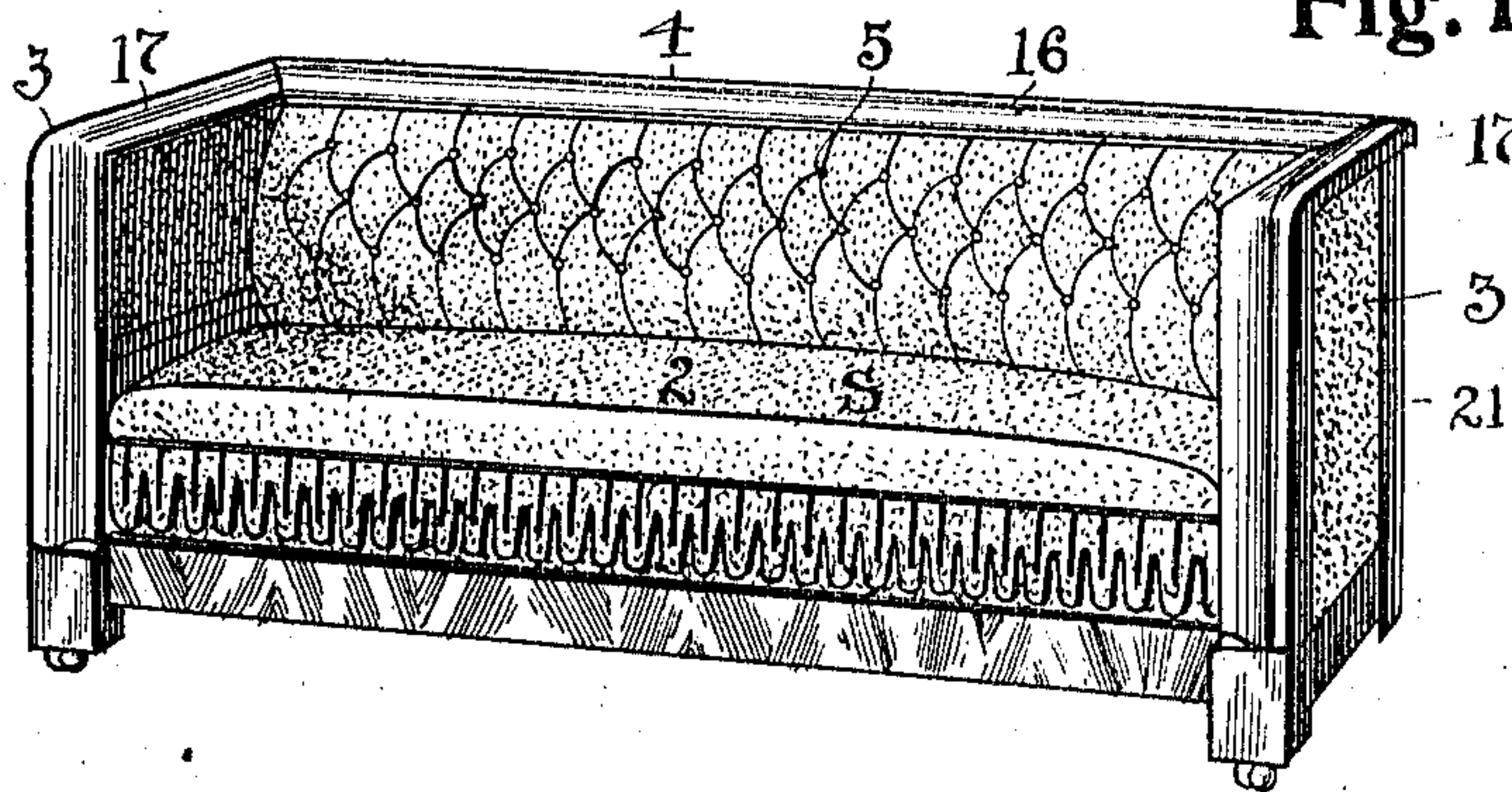


Fig. 2.

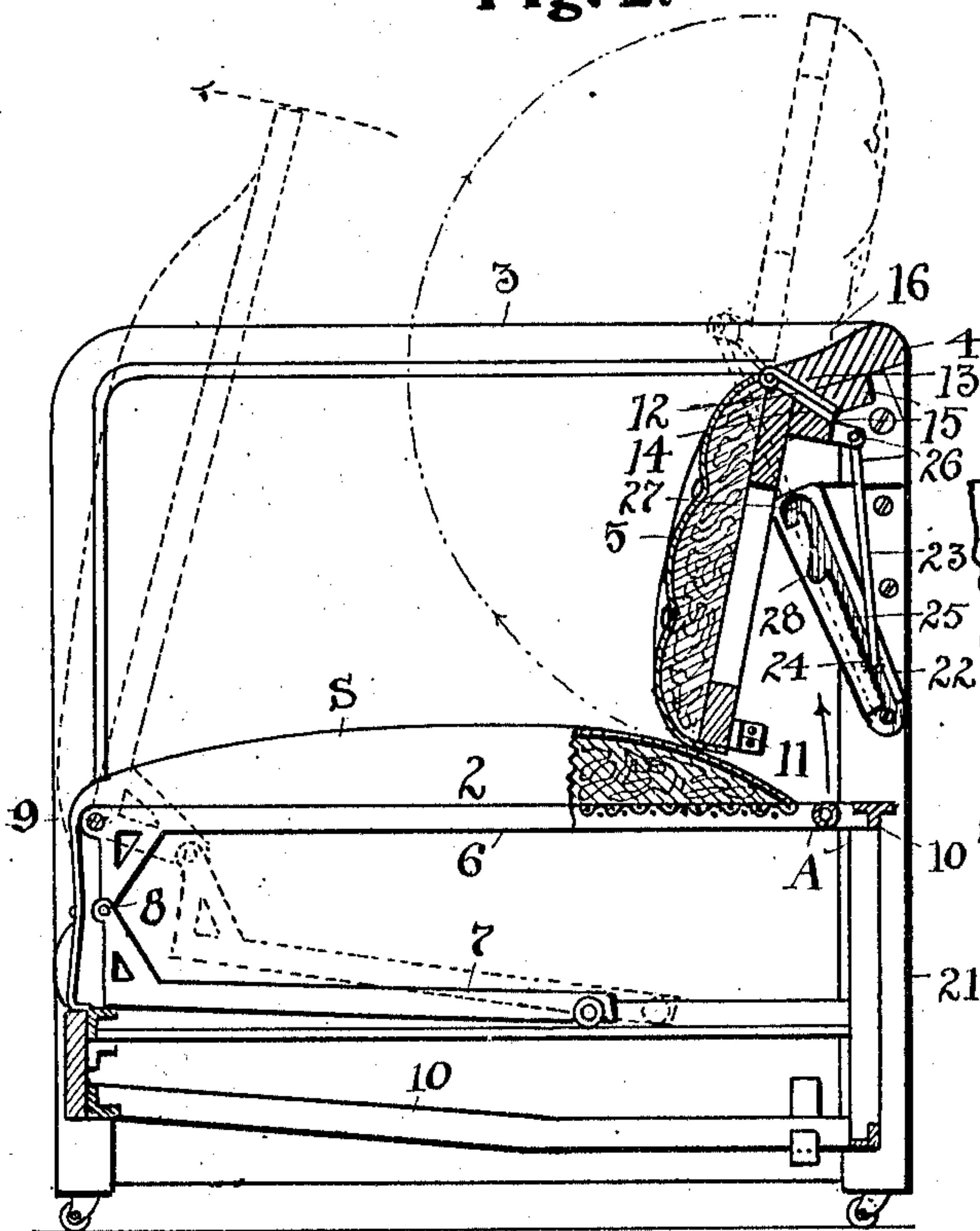


Fig. 3.

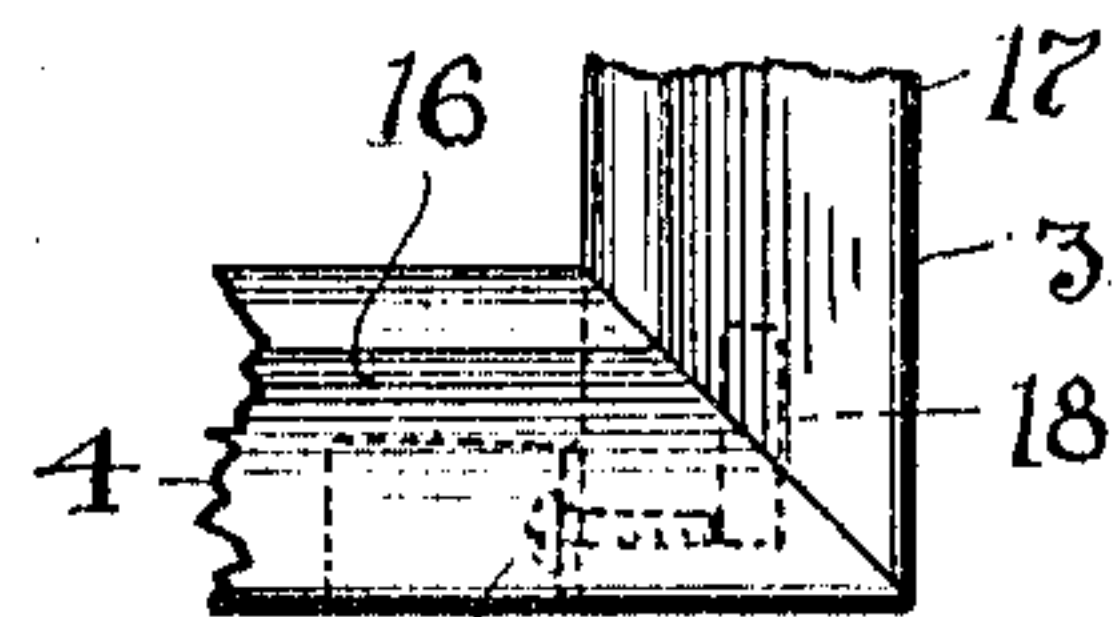
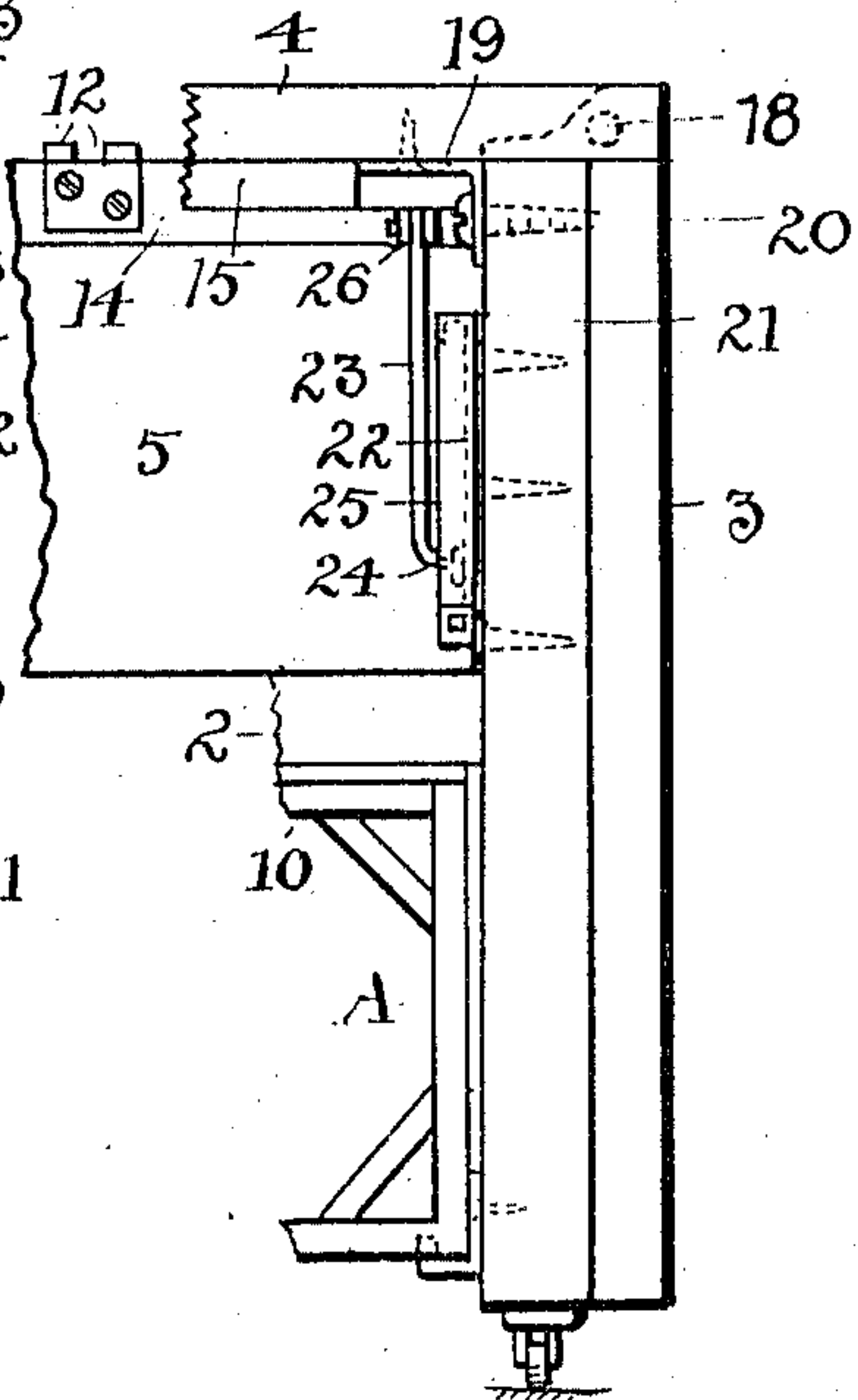


Fig. 4.



ATTEST
E. M. Fisher
J. C. Muesel.

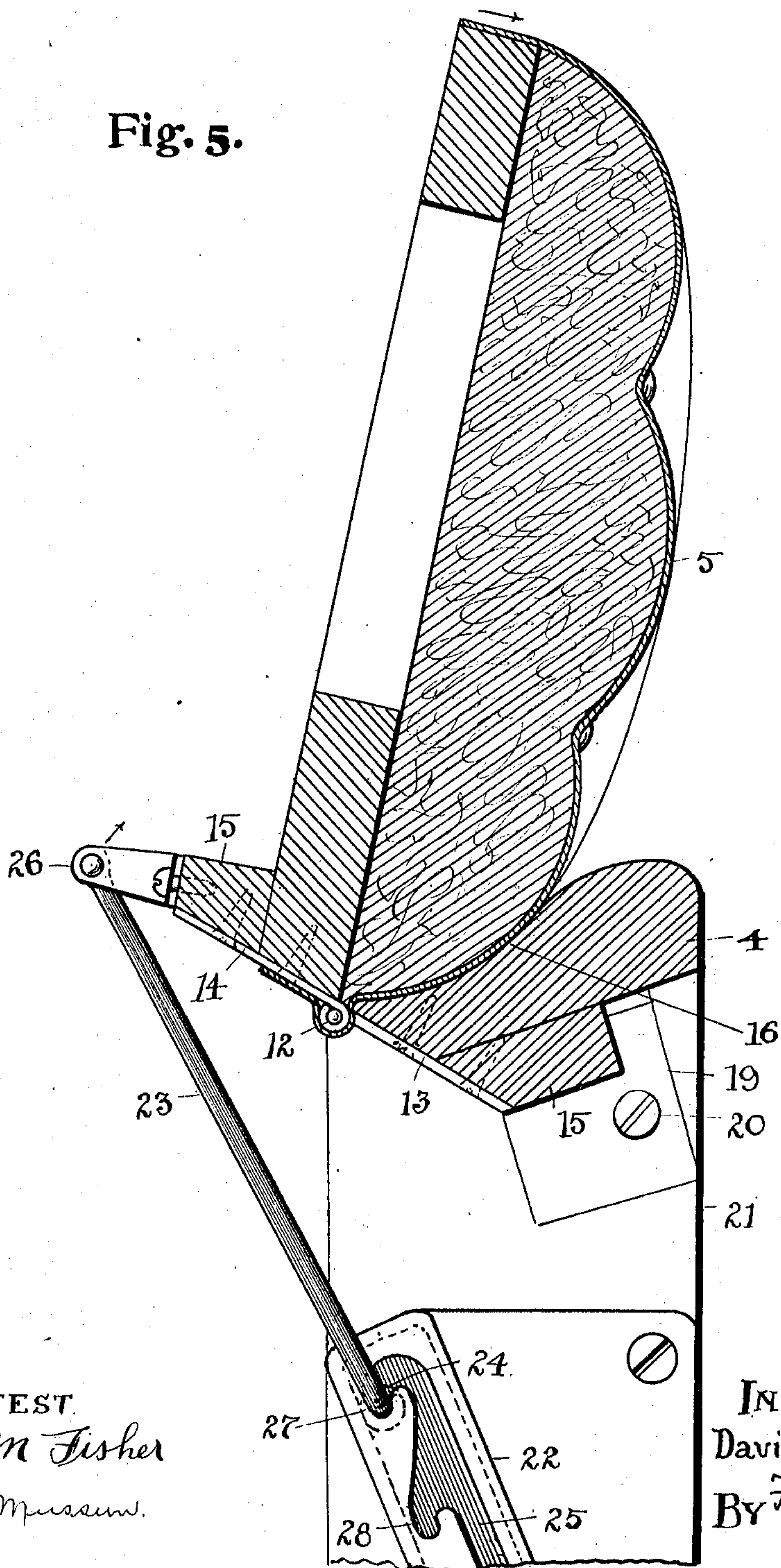
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2 SHEETS—SHEET 2.

Fig. 5.



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UNITED STATES PATENT OFFICE.

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DAVENPORT-BED.

988,498.

Specification of Letters Patent.

Patented Apr. 4, 1911.

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To all whom it may concern:

Be it known that I, DAVID THOMAS OWEN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Davenport-Beds, of which the following is a specification.

My invention is an improvement in davenport beds of the class and kind wherein the couch seat is unfolded to form the bed, and the improvement consists in the construction of the couch frame and back and its related parts, substantially as herein shown and described and more particularly pointed out in the claims. In constructing a davenport to produce an article of furniture adapted for dual uses, great difficulty is experienced in retaining the accepted lines and standard proportions of this style or kind of couch, especially where a low back and continuous border rail is used to give the proper effect and appearance.

My object is to duplicate this type of davenport and at the same time provide a low seat-back suspended from or beneath a rigid stationary top rail, which seat-back may be swung upward to a rest position above the rail with ease and convenience and without injury or crushing of the upholstering on the said seat-back by the rail. The purpose of a lifting back is to get the back out of the way of the bed parts so that they may be folded and unfolded, and a further purpose is to leave the rear of the couch open when used as a bed so that ventilation from front to rear may be had, and also that the upholstering on the back be distantly removed from the occupant of the bed and out of contact by him.

To assure a more or less permanent raised position of the seat-back, as well as to safeguard the occupant of the bed, I also provide self-locking means for the seat-back, which will positively come into action when the seat-back is fully raised.

In my former patents dated Nov. 19, 1907, Nos. 871,180-1, I employed a revolving head rest or seat-back which did not embody a stationary and rigidly connecting rear border rail for the ends of the couch, and my present construction differs therefrom in many other material respects as will hereinafter more fully appear.

In the accompanying drawings, Figure 1

is a perspective view of my improved davenport bed closed and with the bed concealed. Fig. 2 is a cross section, the dotted lines showing the seat-back raised and the bed partly opened. Fig. 3 is a plan view of a corner of the rear and end border rail, and Fig. 4 is a rear elevation of one end of the couch frame showing the link and keeper bracket for the seat-back, also the angle bracket to detachably unite the rear border rail to the couch ends. Fig. 5 is a cross section, considerably enlarged over the other views, of the seat-back raised and locked in inclined rest position above the rear border rail.

The length over all of a davenport bed to which my improvement applies necessarily exceeds six feet to permit a bed of requisite length to be unfolded therefrom, and the depth of the couch frame is about thirty inches while the height to the top of the border rail may be and generally is about thirty-three inches, more or less. This makes a very large piece of furniture of considerable weight, especially when a metallic frame A for the bed forms a part of the structure, as in this case. Experience has therefore developed the need of a practical knockdown structure to permit shipment, movability, and access to and through crowded places, such as doors and stairways. This davenport bed then comprises the couch seat and foldable bed as one separable part, and separate detachable ends or arms 3 and a removable rear rail 4 and seat-back 5, as the other main separable parts. Broadly considered, this knock-down or separability of the parts is not herein claimed as new, but the use of a detachable rear border rail to fixedly unite the couch ends 3 and constructed to suspend a swinging seat-back is believed to be new, especially when combined with an unfolding seat and bed 2.

The seat and bed 2 herein shown is substantially the same as embodied in my former patents and in pending applications and consists of two sections 6 and 7 hinged together at 8, with section 6 pivoted or fulcrumed at 9, either to the ends 3 or to a skeleton supporting frame 10 detachably connected with said ends. However, as the construction of the seat and bed 2 may be considerably varied no stress should be laid upon details and therefore further descrip-

tion thereof may be omitted. Suffice to say that seat and bed 2 are fulcrumed to swing from point 9 on the couch frame to permit seat section 6 to be inverted in making up the bed, and that this sweeping movement necessarily requires seat-back 5 to be thrown up and out of the way as a preliminary step.

Seat-back 5 rests against a stop 11 and in a slightly inclined position when down and completely fills the gap between rail 4 and the upholstered seat S of bed section 6. Hinges 12 secured to the inclined bottom edge 13 of rail 4 and to the seat-back for swinging movement within the couch ends, and both rail 4 and back 5 have reinforcing strips 15 at their meeting edges, a feature of some importance especially as to rail 4 which must sustain the weight and swinging strains imposed upon it by the seat-back.

The arc movement of seat-back 5 must be about 180 degrees to permit the seat-back to rest in raised inclined position as shown in dotted lines, Fig. 2. Heretofore this full movement has been practically unobtainable without marring or injuring the upholstering on the seat-back where it is bound to engage the rail at its front edge but which in the present instance is avoided by providing an inwardly inclined upper face or surface 16 on border rail 4 and preferably curved or concaved as shown though not necessarily. To the eye, the appearance of this border rail is both pleasing and effective, being continuous with the border rail 17 of the ends or arms 3. To further this effect and make a workmanlike joint and finish, the meeting ends of rails 4 and 17 are mitered as shown in Fig. 3, dowel pins 18 (one or more) being used to assure a perfect joint, it being understood of course that the dowel pins are fixed in one rail and removable in the other as usual. To complete the fastening, especially against spreading of the ends 3 outward from rail 4 and seat-back 5, rail 4 is supplied with iron angles 19 which face against ends 3 and are locked or fastened thereto by a screw or bolt 20, see Fig. 4. Instead of a mitered joint, rails 4 may squarely abut against end rails 17 or rear post 21.

Now having an upholstered seat-back which is adapted to come into a rearwardly inclined rest position when raised without injuring the upholstering, a further improvement is made possible by combining therewith means to lock the same in this raised position. This means consists of a slotted keeper or bracket 22 secured to the inside face of end 3 beneath rail 4 and behind seat-back 5 when lowered. A link 23 having a right angled headed end 24 rides within the slotted confining portion 25 of keeper or bracket 22 which is forwardly inclined to permit the link to run freely upward when seat-back 5 is raised and to which latter the said link is pivotally attached at

26. The upper end of the slot in bracket 22 is extended laterally to provide a notch pocket or seat 27 for the link end 24, the link dropping forwardly therein by its own weight as the seat-back is pushed back to raised rest position, the upholstering yielding when the same engages the rounded face 16. The natural spring or cushion of the upholstering also normally holds the link seated in pocket 27. To lower the seat-back, the same is slightly pressed back to lift hook end 24 free of pocket 27 and then the link is pressed forward by hand and the seat-back carried forward and lowered, the link in the meanwhile riding downward in slotted bracket 22. The lower end of the slot in the bracket is left open so that disengagement of the link may be effected when the couch parts are knocked down and separated.

One or more other pockets or notches 28 may also be provided beneath pocket or notch 27 to further safeguard the occupant of the bed against accidental displacement of the link from its higher position of rest and possible falling of the back from its elevated position. In this event, the weight and inclined position of the link would immediately direct it into lower notch 28. The inclined position of keeper 22 also tends to assure self seating of the link in lower notch 28 or series of notches if used.

What I claim is:

1. A convertible bed and couch comprising a foldable seat and bed, and a couch frame having a stationary rear border-rail having a downwardly inclined top surface and a seat-back connected therewith to swing into a rearwardly inclined rest position upon the same.

2. A davenport bed having arm ends and a back and a fixed continuous top border-rail having a reduced front edge, a folding seat and bed section between said ends, and an upholstered seat-back hinged to the border-rail to swing upwardly into a rest position vertically above the same.

3. A couch and bed comprising couch frame ends, a folding seat and bed section between said ends, a detachable top border rail rigidly uniting said ends at their rear having an inclined front edge at its bottom, and a seat-back hinged to the said edge of said rail.

4. In a combined bed and couch, a couch frame comprising arm ends and a upholstered back provided with a rear border rail having an upwardly and outwardly inclined top surface and a reduced front edge, said back being hinged to the bottom of said border rail and adapted to swing into a vertical rest position above said rail.

5. In a combined bed and couch, a couch frame consisting of arm ends and a rear border rail rigidly uniting the rear ends thereof, said rail having a reduced thickness

in its front portion and provided with bottom reinforcing strip, in combination with a seat-back movably related to said border rail and adapted to swing into a vertical rest position above the rail.

6. In a convertible bed and couch, a knock-down structure comprising a seat and bed portion, arm ends, and a back, said back comprising a border rail set on an inclined plane and having detachable connections for said arm ends and a hinged connection for said back.

7. A davenport couch and bed having arm ends and a seat-back bordered by a stationary rail fixed on an inclined plane, said seat-back being hinged to swing above said rail.

8. A convertible couch and bed comprising arm ends and an upholstered seat-back bordered by a rigidly fixed rail having a concaved top surface, said seat-back being hinged to swing upwardly into rest position within and upon said rail.

9. In a convertible couch and bed, an unfolding seat and bed section and couch ends to support the same, a border rail rigidly joining said ends, and a seat-back hinged to said rail, and means mounted upon the couch end and connected with said seat-back to

automatically lock the latter when swung to an upright position.

10. In a convertible couch and bed, an unfolding seat and bed section and a seat-back hinged to permit its elevation and retirement from said section, in combination with a slotted bracket and a link for said seat-back to lock the same when elevated.

11. A couch and bed of davenport design having a removable rear border rail, a seat-back hinged to said rail and transportable therewith, a brace link secured to said seat-back, and couch ends having a slotted keeper-rest detachably connected with said link.

12. In a convertible couch and bed, an unfolding seat and bed section, a swinging seat-back, means to effect self-locking of said seat-back when raised having supplemental safeguarding means to prevent falling of said back.

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

DAVID THOMAS OWEN.

Witnesses:

WM. T. MORRISSEY,
H. H. MASTEN, Jr.

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