2 Sheets—Sheet 1.

C. M. CAMPBELL.
Invalid Bedstead.

No. 225,106. Patented Mar. 2, 1880

Fig. 1.

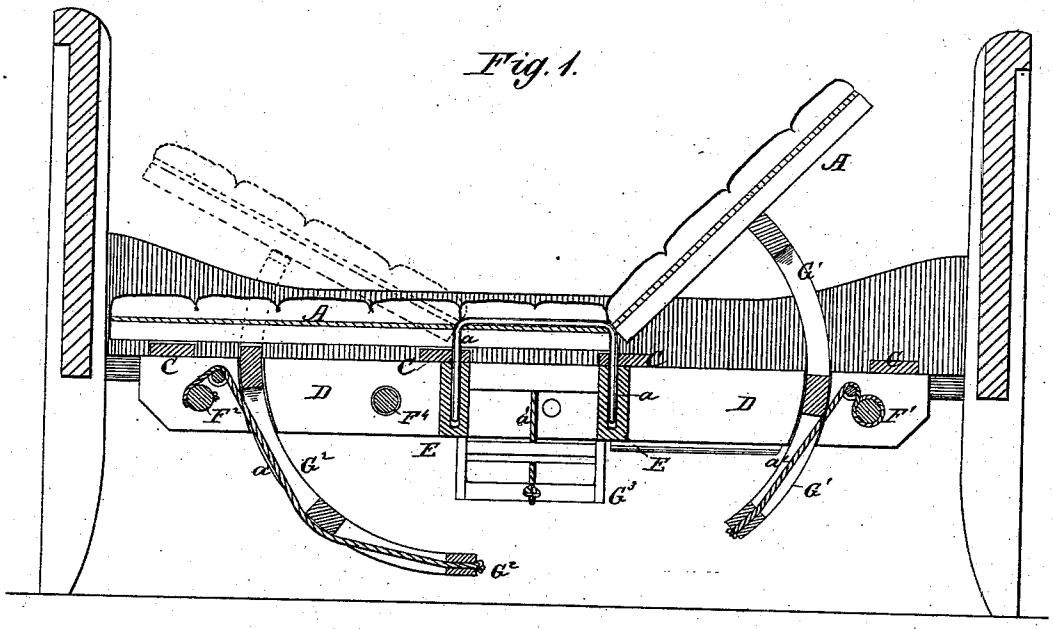
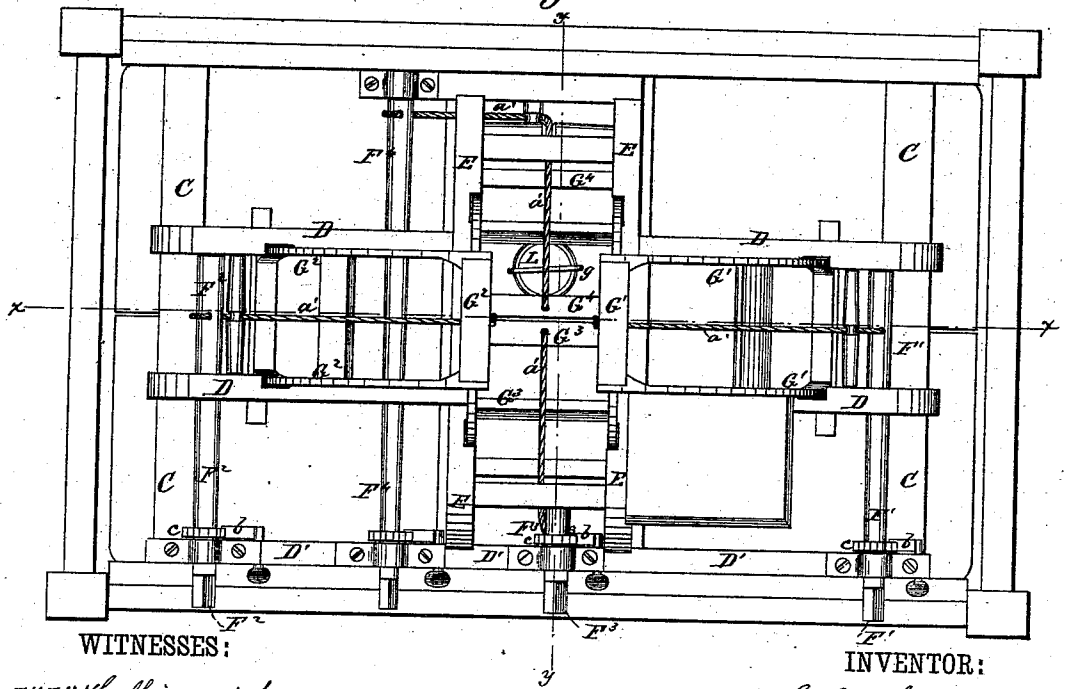


Fig. 2.



WITNESSES:

W. W. Hollingsworth

Amos W. Hart.

INVENTOR:

C. M. Campbell

BY Munn & Co

ATTORNEYS.

N. PETERS. PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

2 Sheets—Sheet 2.

C. M. CAMPBELL.
Invalid Bedstead.

No. 225,106. Patented Mar. 2, 1880.

Fig. 3.

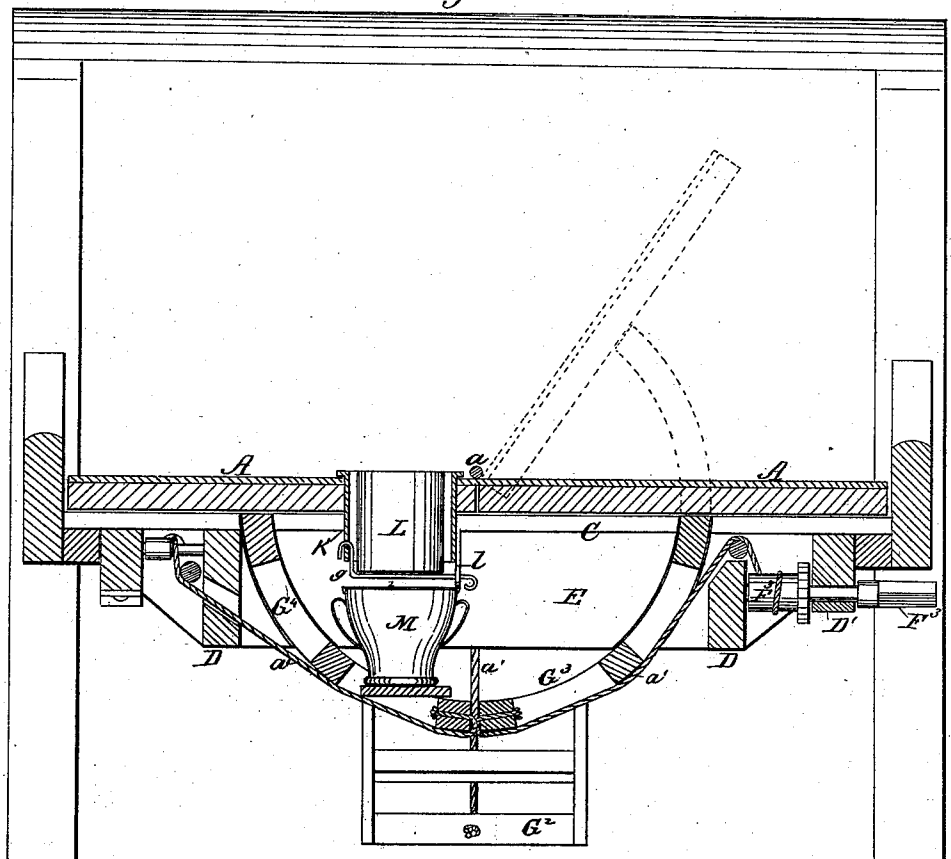
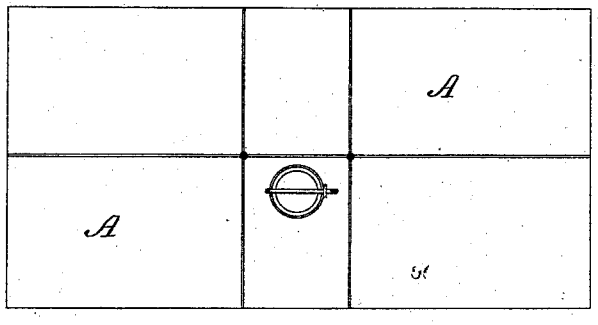


Fig. 4.



WITNESSES:

W. W. Hollingsworth

Amos W. Hart

INVENTOR:

C. M. Campbell

BY Munn & Co

ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHAMBERS M. CAMPBELL, OF NASHVILLE, OHIO.

INVALID-BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 225,106, dated March 2, 1880.

Application filed November 14, 1879.

To all whom it may concern:

Be it known that I, CHAMBERS M. CAMPBELL, of Nashville, in the county of Holmes and State of Ohio, have invented a new and Improved Invalid-Bedstead; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in the class of invalid-beds having adaptation and attachments for elevation of the head and shoulder portion, and for introduction of a bed-pan beneath a removable section of the mattress.

My improvement relates to and consists in the construction and arrangement of parts, as hereinafter described and claimed.

In accompanying drawings, forming part of this specification, Figure 1 is a longitudinal section of my improved bed, showing one end of the mattress-support raised. Fig. 2 is a plan view of the same inverted. Fig. 3 is a vertical section on line *y y*, Fig. 2. Fig. 4 is a plan view of the mattress-support detached and inverted.

The floor or flat wooden support A for the mattress (not shown) is formed of six rectangular sections, which are hinged together, as shown in Figs. 1, 3. Thus the said mattress-support A is adapted either to lie flat on the cross slats or bars C or to be raised at either end or either side, as the condition or treatment of the patient may require. The floor A is held in place on the bars C by dowel-pins *a*, but may be readily detached by lifting it vertically. To the under side of said bars C is attached a frame having lengthwise bars D and D′ and cross-bars E. In such frame D D′ E the four windlasses F′ F^2 F^3 F^4 and curved sliding bars or frames G′ G^2 G^3 G^4, for raising the respective head, foot, and two side sections of the mattress-floor A, have their bearings and are supported in suitable ways respectively.

One object in constructing the sliding frames G′ G^2 G^3 G^4 with a curve is to accommodate their length in the space usually provided beneath a bedstead of ordinary height, and another is to enable the said frames to follow the hinged sections of the mattress-support A when being raised or lowered.

The frames G′ G^2 raise and lower the end sections of the mattress-floor A and slide in ways formed by curved grooves in the respective end portions of the lengthwise bars D D′. These frames G′ G^2 are operated by windlasses F′ F^2, having cords *a′* and pawls *b* and ratchets *c*, arranged as shown in Figs. 1 3. The other two frames, G^3 G^4, are employed for raising and lowering the sides of the mattress-floor A, and are accordingly arranged between the respective ends of cross-bars E, and are operated by windlasses F^3 F^4, having cords and pawls and ratchets similarly arranged.

The heads of the respective frames G′ G^2 G^3 G^4 are sufficiently long to extend some distance on each side of the joints of the hinged sections of floor A, so as to adequately support any portion of the latter when in the elevated position. I show in Fig. 1 an end section of such floor elevated at an obtuse angle. To effect this a turning-key or wrench is applied to the squared end of windlass F′ and the latter rotated, thereby winding the cord *a′* around it and sliding the frame G′ upward. When the rotation of the windlass is arrested the pawl *b* locks it, and thus holds the parts fixed in position.

To lower the hinged floor-section, the pawl *b* is held off the ratchet *c*, and the too rapid rotation of the windlass and descent of the frame prevented by application of the turning-key, as before.

The advantages of such means and facilities for the elevation of the head and feet of a patient, either separately or together, or for turning him from one side or position to the other, or enabling him to assume a sitting or other position, are obviously great, and need not be enumerated here.

For the purpose of facilitating defecation and urination, I provide one of the middle sections of the mattress-support A with a hole, in which is held a pendent tube, K, by a hinged cross-bar, *g*. The plug L of said tube being removed, the patient is placed in proper position by aid of the adjustment of the hinged sections of the mattress-floor A, and a receptacle, M, having a removable cover, *h*, is placed beneath the tube K. The support for the receptacle is on the lower end of one of the sliding side frames, as shown in Fig. 3.

When the operation is finished the cover of receptacle M is replaced and the latter removed, and the plug L reinserted in tube K

and supported by the bar *g*, whose free end engages a catch, *l*.

When not in use the receptacle M and turn-key may be placed on a shelf attached to the bars.

I do not claim a mattress-floor composed of sections hinged together, nor the use of curved sliding frames for raising said sections and holding them elevated.

What I claim is—

1. The grooved lengthwise bars and the grooved cross-bars, connected and forming one rigid frame, in combination with the bedstead and the sliding frames G' G^2 G^3 G^4, and elevating devices F' F^2 F^3 F^4, and the hinged sectional mattress, all as shown and described.

2. The combination, with the mattress-floor, made in sections, hinged together, and having a hole and pendent tube, of the sliding side frames, G^3 G^4, adapted, as described, to lift the sections above them, and, in their lowered position, to support a receptacle for excremental matter, as specified.

The above specification of my invention signed by me this 29th day of October, 1879.

C. M. CAMPBELL.

Witnesses:
SOLON C. KEMON,
CHAS. A. PETTIT.