

(No Model.)

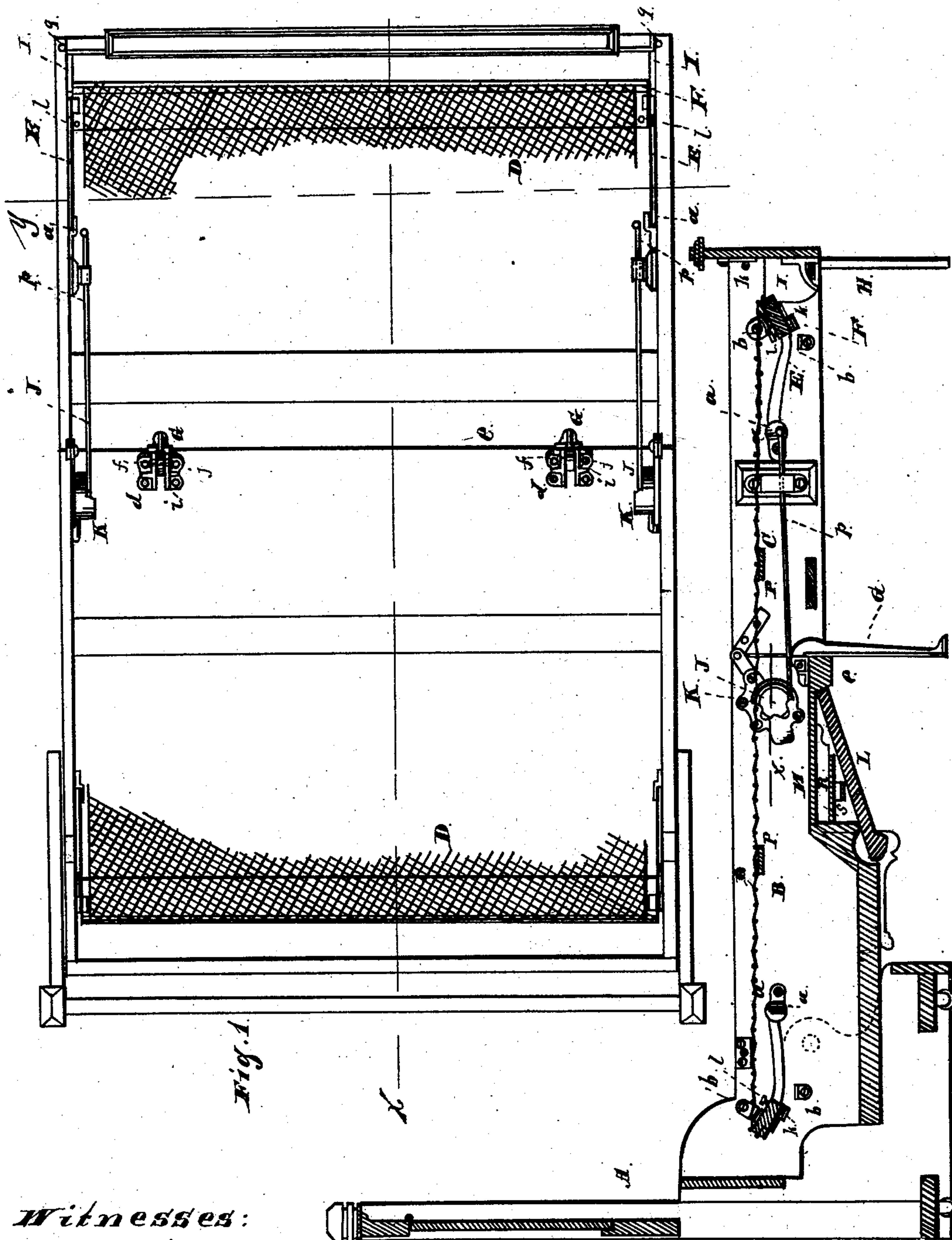
3 Sheets—Sheet 1.

A. W. STEWART.

WARDROBE BED.

No. 248,064.

Patented Oct. 11, 1881.



Witnesses:

Albert H. Adams,  
Edgar T. Bond

Fig. 2.

Inventor:

Alexander W. Stewart

(No Model.)

3 Sheets—Sheet 2.

A. W. STEWART.  
WARDROBE BED.

No. 248,064.

Patented Oct. 11, 1881.

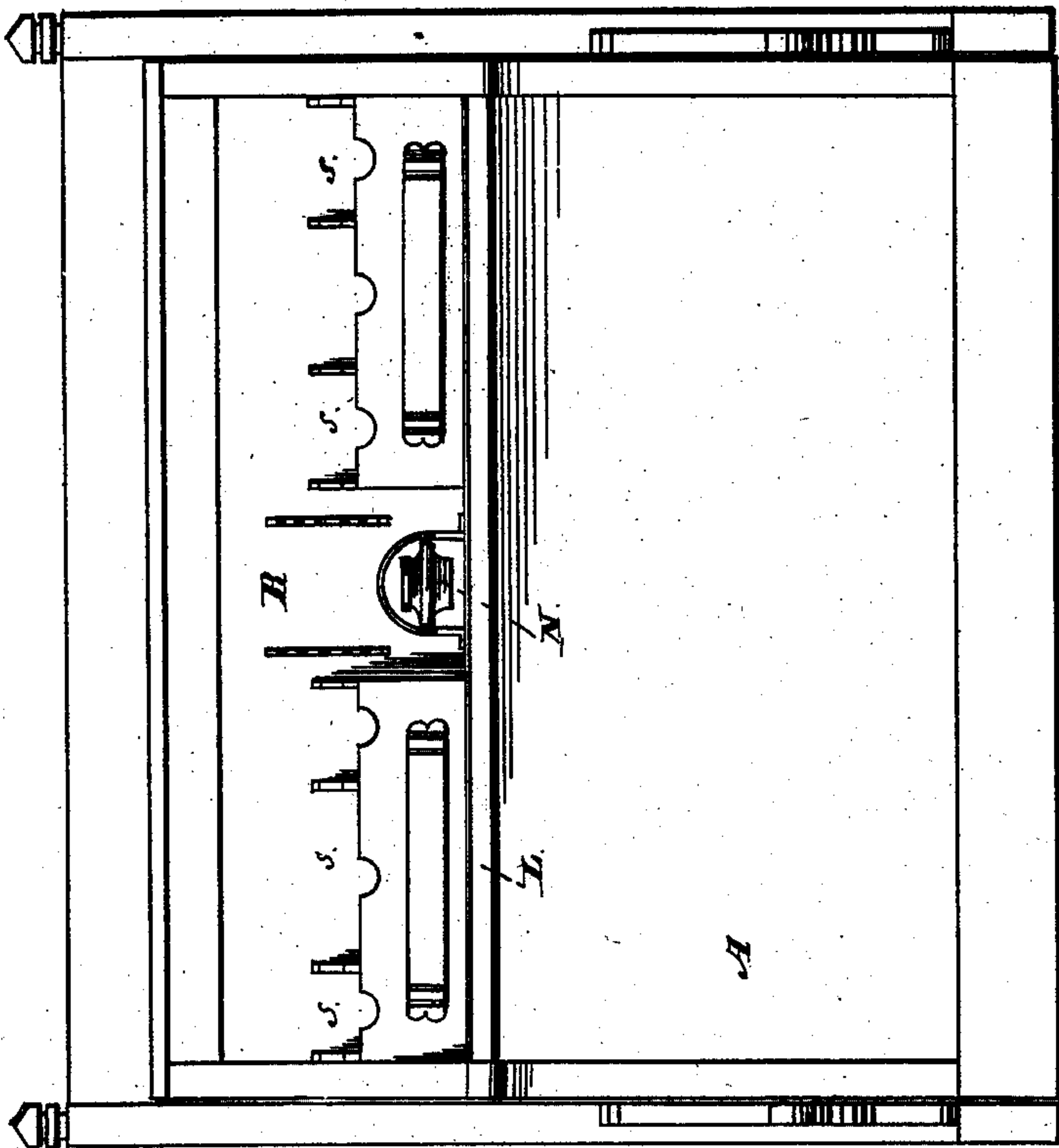


Fig. 4.

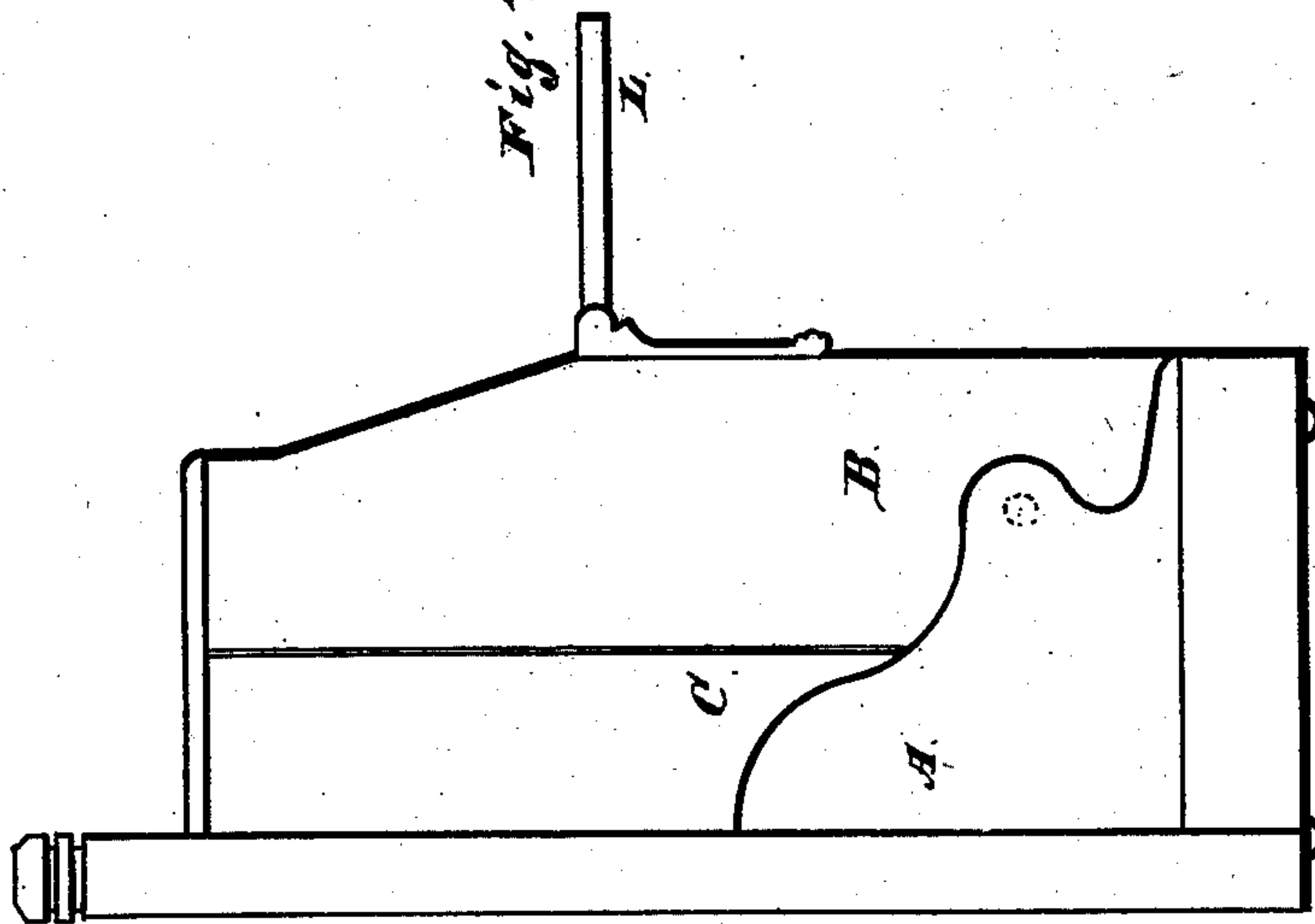
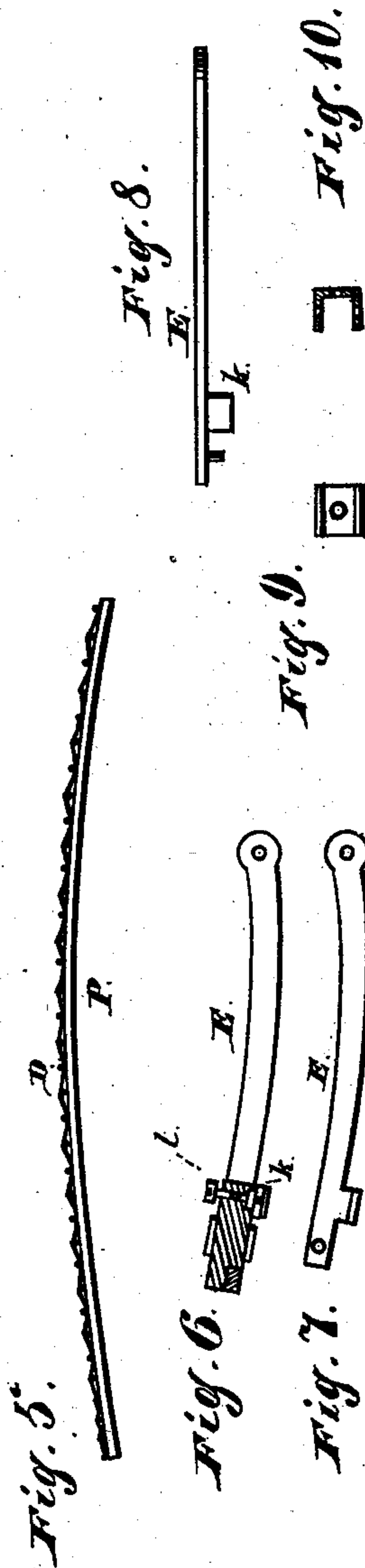


Fig. 3.

Witnesses:  
Albert H. Adams,  
Edgar T. Bond

Inventor:  
Alexander W. Stewart



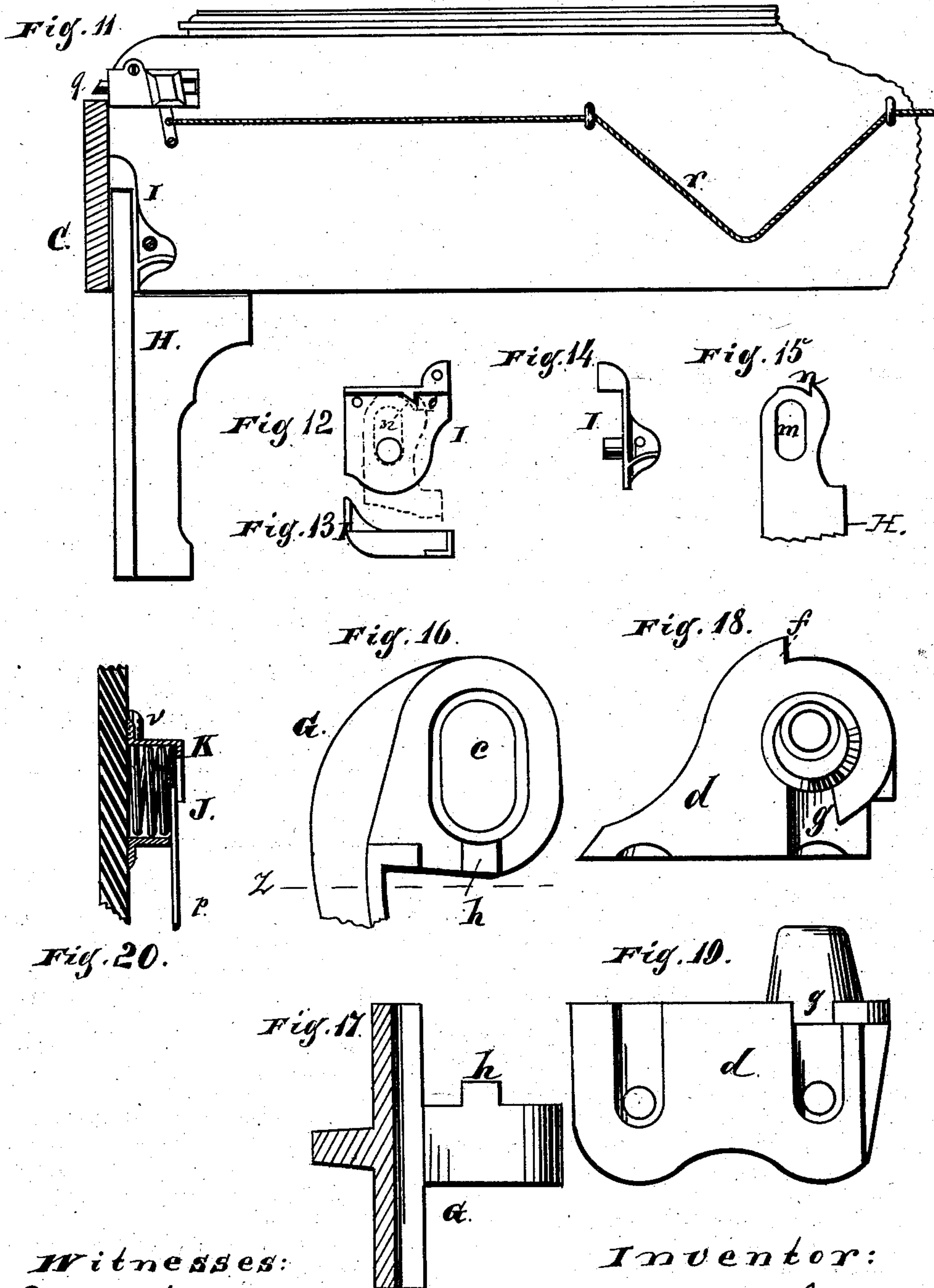
(No Model.)

3 Sheets—Sheet 3.

A. W. STEWART.  
WARDROBE BED.

No. 248,064.

Patented Oct. 11, 1881.



Witnesses:  
Albert H. Adams.  
Edgar T. Bond

Inventor:  
Alexander W. Stewart



# UNITED STATES PATENT OFFICE.

ALEXANDER W. STEWART, OF CHICAGO, ILLINOIS.

## WARDROBE-BED.

SPECIFICATION forming part of Letters Patent No. 248,064, dated October 11, 1881.

Application filed April 18, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER W. STEWART, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented new and useful Improvements in Wardrobe-Beds, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a plan, the fabric being mostly removed. Fig. 2 is a vertical section at line *x* of Fig. 1; Fig. 3, a side elevation, showing the case folded; Fig. 4, a front elevation when ready to be used for writing; Fig. 5, a cross-section, giving a side view of the cross-bar P. Figs. 6, 7, 8, 9, and 10 are details, showing chiefly the devices for adjusting the tension of the fabric; Fig. 11, a section at line *y* of Fig. 1, looking to the right; Figs. 12, 13, and 14, details of the iron which holds the end leg; Fig. 15, a side view of the upper end of one of the foot legs; Fig. 16, a side view of the upper end of one of the center legs; Fig. 17, a section at line *z* of Fig. 16, looking up; Fig. 18, an inside view, and Fig. 19 a bottom view, of the iron on which the center leg is pivoted; Fig. 20, a detail, being a section at line *x* of Fig. 2.

My improvements relate primarily to wardrobe-beds which fold.

My invention consists in the combination, with the hinged sections of a folding bed, of arms pivoted at their inner ends to the inside of the side pieces of the hinged sections, and having their free outer ends connected with the ends of transverse bars, to which a woven-wire fabric is attached, said arms being adapted to rise and fall, but limited in their rising-and-falling motion by fixed stops arranged above and below said arms, all as hereinafter more fully set forth.

The invention further consists in a bed-bottom composed of a woven-wire fabric for the bedding, which is capable of yielding both laterally and longitudinally, combined with a series of bars arranged beneath said fabric transversely across the same, and attached at their ends to the woven-wire fabric for the purpose of sustaining the same at its full width under pressure.

The invention consists of certain other fea-

tures, which will be fully hereinafter described in detail, and specifically pointed out in the claims.

In the drawings, A is a case for the folded bed.

B C are the two sections of a divided frame, which are hinged together, B being hung on pivots in the case A.

D is a woven-wire fabric, secured at each end to end bars in any suitable manner.

E are cast arms, pivoted to the inside of the side pieces of the sections B C at *a*. The outer ends of these arms are free, and in such free ends the end bars are pivoted. This can be done by means of pins inserted in the ends of the bars F.

*b* are stops to limit the movement of the arms E. On the inside of each of the arms E, which are at one end of the bed, is a projection, *k*.

*l* are screws passing through the end rail, F, the lower end of each screw coming in contact with a projection, *k*. The end bars are inclined, as shown.

G are legs which support the central part of the bed. Each is provided with a slot, *c*, at the upper end.

*d* is an ear fastened to the cross-bar *e*. It has a hollow trunnion on one side, which enters the slot *c* in the leg G. On the top of this ear is a projection, *f*, and just below the trunnion is a notch or recess, *g*.

*h* is a projection on the side of the leg G, just below the lower edge of the slot *c*, arranged to engage with the projection *f* when the bed is closed and to enter the recess *g* when open. *i* is another ear, secured to the bar *e* on the opposite side of the leg from the ear *d*.

*j* is a bolt which passes through the ears and trunnion and holds the leg G securely in place.

H are the legs at the foot of the bed. Near the top of each is a slot, *m*, arranged at one side of the center of gravity.

I are irons, each having a trunnion on the inside, on which trunnions the legs are pivoted. These irons are secured to the inside of the side rails. I provide the top of the leg with a projection, *n*, and also place a projection, *o*, on the iron I to engage with this projection *n* and act as a lock when the leg is down.

J are coil-springs held in a casting, K. One end of the spring enters a recess, *v*, at the side



of this casting, and at the other end is a long arm, *p*. The casting K is secured to the section B of the frame, and the end of the arm *p* is then bent down and secured loosely in any  
5 suitable manner to the other section. The amount of tension of the spring depends on the position of the casting K, and the adjustment should be such that the spring will aid in opening and closing the bed.

10 *q q* are catches which hold the frame when folded, and *r* is a cord by means of which the catches can be withdrawn.

L is a hinged leaf, which forms a part of the front of the case, and which can be turned  
15 down to serve the purpose of a writing-table. Back of this leaf is a shallow chamber, of which the vertical board M forms the back, which chamber R is provided with a number of receptacles, *s*, for stationery.

20 N is a marine inkstand.

To maintain the woven-wire fabric D at its full width and prevent it from being drawn in toward the center at the edges under pressure is desirable; and for this purpose I have applied spring-bars P P to the under side of the  
25 fabric. These bars may be made of steel or wood, and preferably are curved upward a little at the center. The ends of these bars P P are secured to the edges of the fabrics, and  
30 they may also be secured at their centers to the fabric.

The operation is as follows: The woven-wire fabric is to be secured to the end bars, F, so that when the bed is open the fabric will be under  
35 proper tension. The end bars are secured to the outer ends of the arms E, which are pivoted to the sides of the frame, and when the bed is open the end bars will be raised till the arms E come in contact with the upper stops,  
40 *b*. When the bed is folded the end bars will both drop down till the arms E come in contact with the lower stops, *b*. The tension of the fabric D can be adjusted by means of the screws *l* and pivoted inclined end bars, F.

45 The cross bars or slats P P serve an important office. They maintain the central part of the fabric at its full width when under pressure, and as they are yielding they do not interfere at all with the use of the fabric or its  
50 elasticity. I have shown two of these bars; but a greater number may be used, or one will serve a useful purpose.

The legs heretofore used in the center of folding beds have been removable, and if not properly adjusted some part of the frame is likely  
55 to be broken or injured. The legs G, which I have applied, are so constructed that they do not have to be removed, but they can be turned over against the under side of the fabric D  
60 when the bed is folded, and turned down when it is open. They are also so made that they will be automatically locked when the bed is open by means of the projection *h*, which will then enter the recess *g*, and when the bed is  
65 folded and the leg G turned up the projections *f* and *h* will act as a stop. The slot *c* in

the leg allows it to move up and down a little—enough to permit the projection *h* to enter and be disengaged from the recess *g*.

The legs H, at the foot of the bed, are so  
70 formed and connected with the frame that they open when the bed is opened and close when it is folded, by gravity, and when the bed is open they will be locked by the engagement of the projections *n* and *o* with each other. 75

It requires considerable force both to open and close wardrobe-beds as heretofore made. The action of the springs J relieves the party handling the bed and aids at the most difficult point. These springs are so applied that  
80 they are under tension both when the bed is closed and when open. The upper stops, *b*, are located below the hinge which connects the sections B C, so that when the bed is open the tension of the fabric will hold the sections  
85 open.

As the springs tend to open the bed, it is necessary to provide some fastening to keep it closed. The spring-catches *q q* serve this purpose. They can be released by pulling on  
90 the cord *r*.

The spring-bars P P may be applied to mattresses or bed-bottoms which do not fold, and which have a fabric attached at its ends only, and hence I do not limit this feature of my in-  
95 vention to wardrobe-beds.

I am aware that one end bar has been heretofore made so as to drop to give room for bedding; but both end bars have not been so made, it having been supposed to be neces-  
100 sary to secure the netting permanently at one end of the frame. As this has been done, the end of the section to which the netting has been so connected has been liable to spring and break out at the corners. By hanging  
105 both end bars as shown and described I get additional room for bedding and take all strain from the ends of the frame.

What I claim as new, and desire to secure by Letters Patent, is as follows: 110

1. In a folding bed, the combination, with the hinged sections B and C, of the arms E, pivoted at their inner ends to the inside of the side pieces of the hinged sections, and having their free outer ends connected with the ends  
115 of the transverse bars F, and limited in their rising and falling motion by fixed stops arranged above and below said arms, and the woven-wire fabric D, secured at its ends to the transverse bars F, all substantially as and for  
120 the purposes described.

2. The combination, in a bed-bottom, of a woven-wire fabric for the bedding, which is capable of yielding both laterally and longitudinally, with a series of bars arranged be-  
125 neath the said fabric transversely across the same, and attached at their ends to the edges of the woven-wire fabric, for the purpose of sustaining the same at its full width under pressure, substantially as described. 130

3. In a wardrobe-bedstead consisting of hinged sections B and C, the attached ear *d*,



formed with the lateral trunnion and the recess *g* at its lower portion and the projection *f* at its top, in combination with the central leg, *G*, provided with the elongated slot *c* and lateral projection *h*, all constructed and arranged substantially as and for the purpose described.

4. In a wardrobe-bed composed of hinged sections *B* and *C*, the end leg, *H*, constructed with the elongated slot *m* and projection *n* at its top, in combination with the iron *I*, attached to the section *C*, and formed on its inner side with the trunnion to pass through the slot in the leg, and with the downward projection *o* on its top wall for engaging the projection *n* of the leg, the whole constructed and arranged as described to permit the leg to fall by gravity and automatically lock, as set forth.

5. In a wardrobe-bedstead, the combination, with the two hinged sections *B C*, of the springs *J*, attached to the rails at one side of the hinge

or joint, and provided with an arm, *p*, as described, the said springs and arms being connected with the jointed sections of the bed-frame upon opposite sides of the hinged joint, substantially as set forth.

6. In a warbrobe-bedstead, the combination of divided and hinged side rails with a coil-spring attached to one of said side rails, and provided with an arm extending past the joint connecting the divided sections of the side rails and attached to the latter, substantially as and for the purpose described.

7. In a wardrobe-bedstead, the jointed frame *B C*, provided with a chamber, *R*, having receptacles *s*, in combination with a folding leaf, substantially as and for the purpose described.

ALEXANDER W. STEWART.

Witnesses:

B. A. PRICE,  
A. H. ADAMS.