No. 713,666. Patented Nov. 18, 1902.

J. J. McDONOUGH.

BEDSTEAD.

(Application filed Dec. 27, 1901.)

(No Model.)

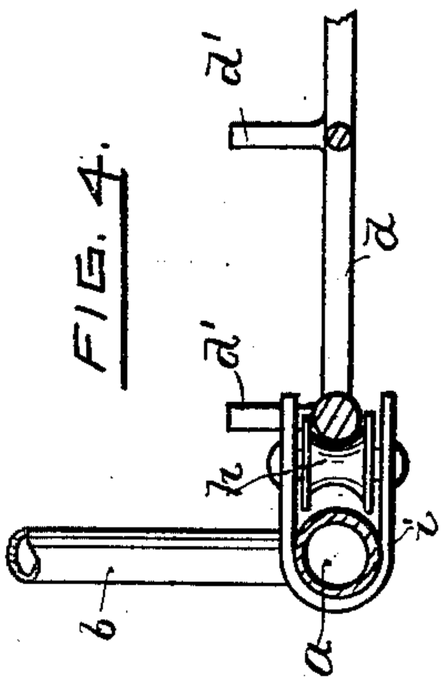

FIG. 4.

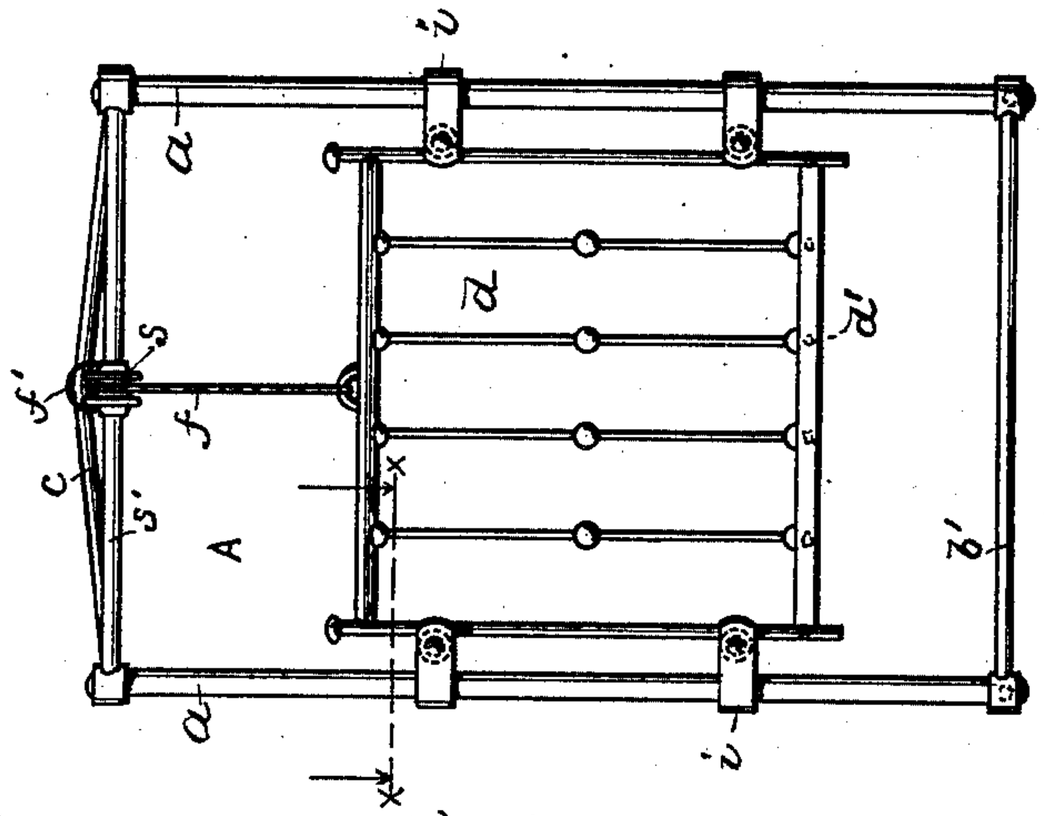

FIG. 2.

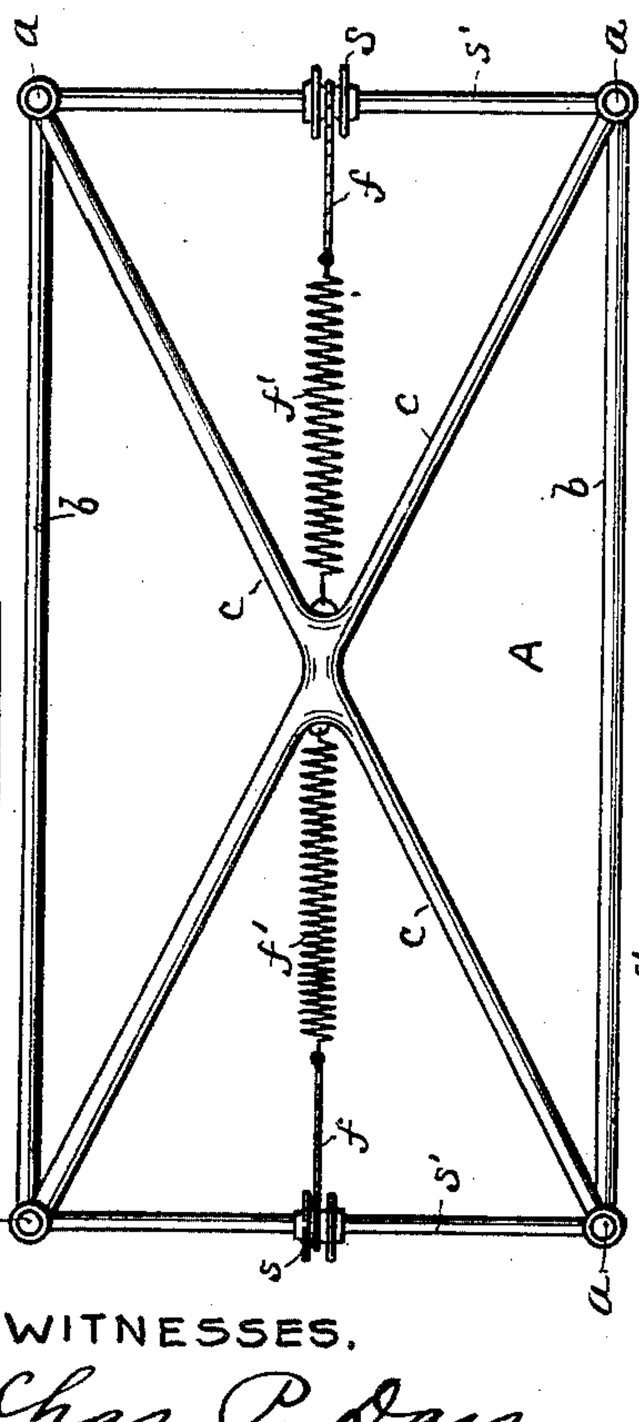

FIG. 3.

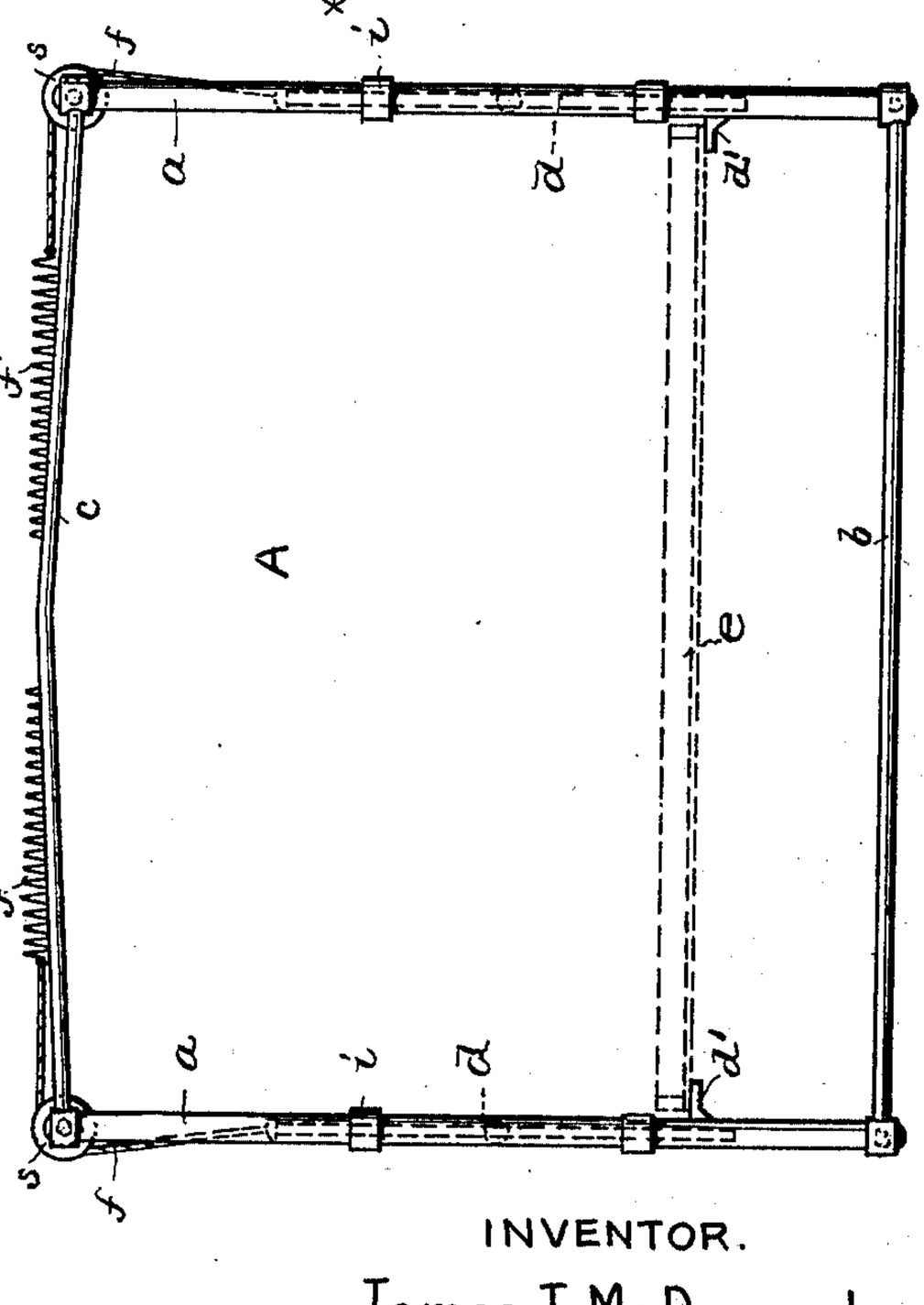

FIG. 1.

WITNESSES.

Chas. P. Day.

William A. Sellman.

INVENTOR.

James J. McDonough.

By Geo. H. Remington & Co.

Att'ys

UNITED STATES PATENT OFFICE.

JAMES J. McDONOUGH, OF ABINGTON, MASSACHUSETTS.

BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 713,666, dated November 18, 1902.

Application filed December 27, 1901. Serial No. 87,459. (No model.)

To all whom it may concern:

Be it known that I, JAMES J. McDONOUGH, a citizen of the United States of America, and a resident of Abington, Plymouth county, and State of Massachusetts, have invented certain new and useful Improvements in Bedsteads, of which the following is a specification.

My invention relates to bedsteads of the type or class in which the bed proper is supported by a suitable spring or slat carrying frame, in turn supported by other springs or analogous means.

In bedsteads of the kind just referred to it has been usual, so far as I am aware, to mount the frame-supporting springs in or directly upon the posts of the bedstead. There are practical objections or disadvantages to such former devices. For example, the thus mounted bed-carrying frame is not capable of a sufficient degree of vertical movement. The frame must be maintained in a substantially true horizontal position in order that it may move in a comparatively free manner, as otherwise the supporting-guides become cramped, thus seriously affecting the efficiency of the device.

The object I have in view or seek to attain is to produce a bedstead in which the disadvantages above referred to are overcome, the bed-frame being so supported that it is capable of movement with a minimum degree of friction. It is self-adjusting in that the device works freely, even though the load or weight upon the bed be very unevenly distributed. Another advantage possessed by my improved bedstead is that the working strains or forces are mainly borne by upper ties or braces attached to the upper ends of the posts of the bedstead in such manner that the latter is additionally strengthened and given greater rigidity, all as will be more fully hereinafter set forth and claimed.

In carrying out my invention I provide each of the head and foot members of the bedstead with a vertically-slidable frame suspended from a strong yielding connection fixed to a diagonal tie or brace secured overhead to the four posts of the bedstead. The said end frames are provided with suitable means for supporting the usual bed or slat carrying frame. As thus constructed the front and rear sides of the bedstead are wholly free and unobstructed.

In the accompanying sheet of drawings, Figure 1 is a side elevation of a bedstead embodying my improvements, the mattress and bedding being omitted. Fig. 2 is a corresponding end view. Fig. 3 is a plan view. Fig. 4 is a horizontal sectional view, enlarged, taken on line *x x* of Fig. 2.

A, again referring to the drawings, designates my improved bedstead as a whole. I may state that bedsteads of this class are usually made of suitable metal, as brass, iron, &c. The four corner-posts *a* of the bedstead are suitably connected together at or near the base by side and end ties *b b'* or in any other well-known manner. The posts extend to a convenient height and are provided at the top with a diagonal tie or brace *c*, the ends of which are secured to the respective ends of the posts. The said member *c* forms a strut as well as a tie, thereby insuring that the posts are prevented from lateral movement. Between each pair of end posts is arranged a vertically-movable frame *d*, having inwardly-extending horizontal pins or members *d'* at its lower end for supporting a slat-carrying frame or bed-spring *e*, as indicated by dotted lines in Fig. 1. Each of said frames *d* is suspended from a flexible connection *f*, extending upwardly and over a freely-turning idler-sheave *s* and is secured to a helical spring or yielding connection *f'*, in turn firmly secured to said top brace *c*, as indicated in Fig. 3, said sheaves being mounted on upper ties *s'*, as shown.

The frames *d* are guided in suitably constructed and arranged freely-turning flanged rollers *h*, mounted in clips or brackets *i*, secured to the posts *a*. (See Fig. 4.) The said rollers *h* may be made of rubber or other non-resonant material, thereby rendering the movements of the apparatus practically noiseless.

While I have represented my improved bedstead in its simplest form, it is obvious that without departing from the spirit of the invention the shape and proportion thereof may be materially changed, as well as being made quite ornamental, if desired.

I claim as my invention and desire to secure by United States Letters Patent—

In a bedstead, the combination with the four corner-posts thereof rigidly secured together at the bottom, of the overhead diagonal tie member *c* arranged to firmly secure the said posts together at the top of the bedstead, a guided vertically-movable bed-supporting frame *d* mounted in each end portion of the bedstead, resilient connections, *f*, *f'*, secured to said frames *d* and also attached to said tie member *c*, and suitably-mounted guides or sheaves *s* having said connections supported thereon, all constructed, arranged and adapted for operation substantially as shown and described.

Signed at Providence, Rhode Island, this 21st day of December, 1901.

JAMES J. McDONOUGH.

Witnesses:

GEO. H. REMINGTON,

WILLIAM A. SULLIVAN.