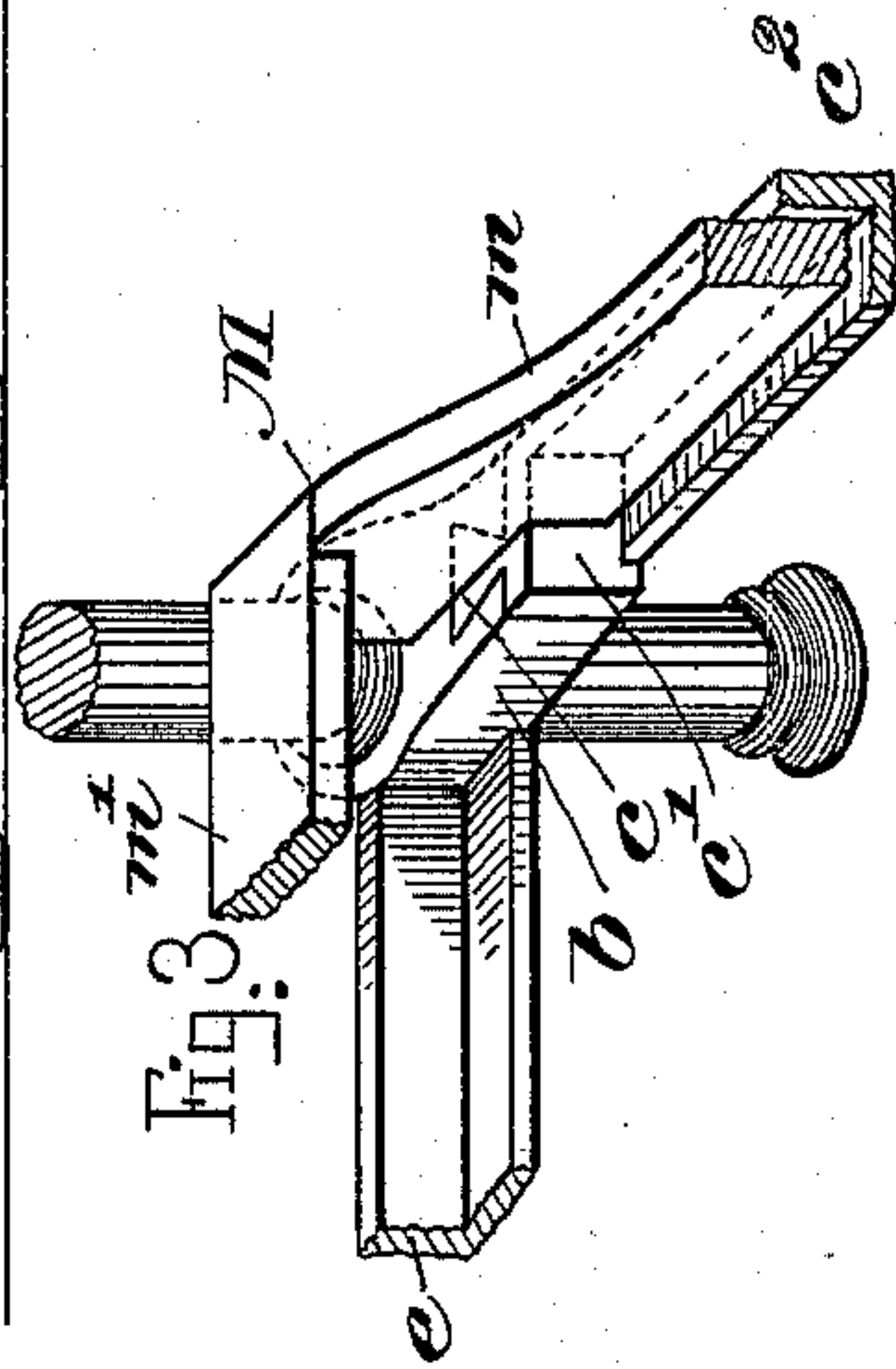
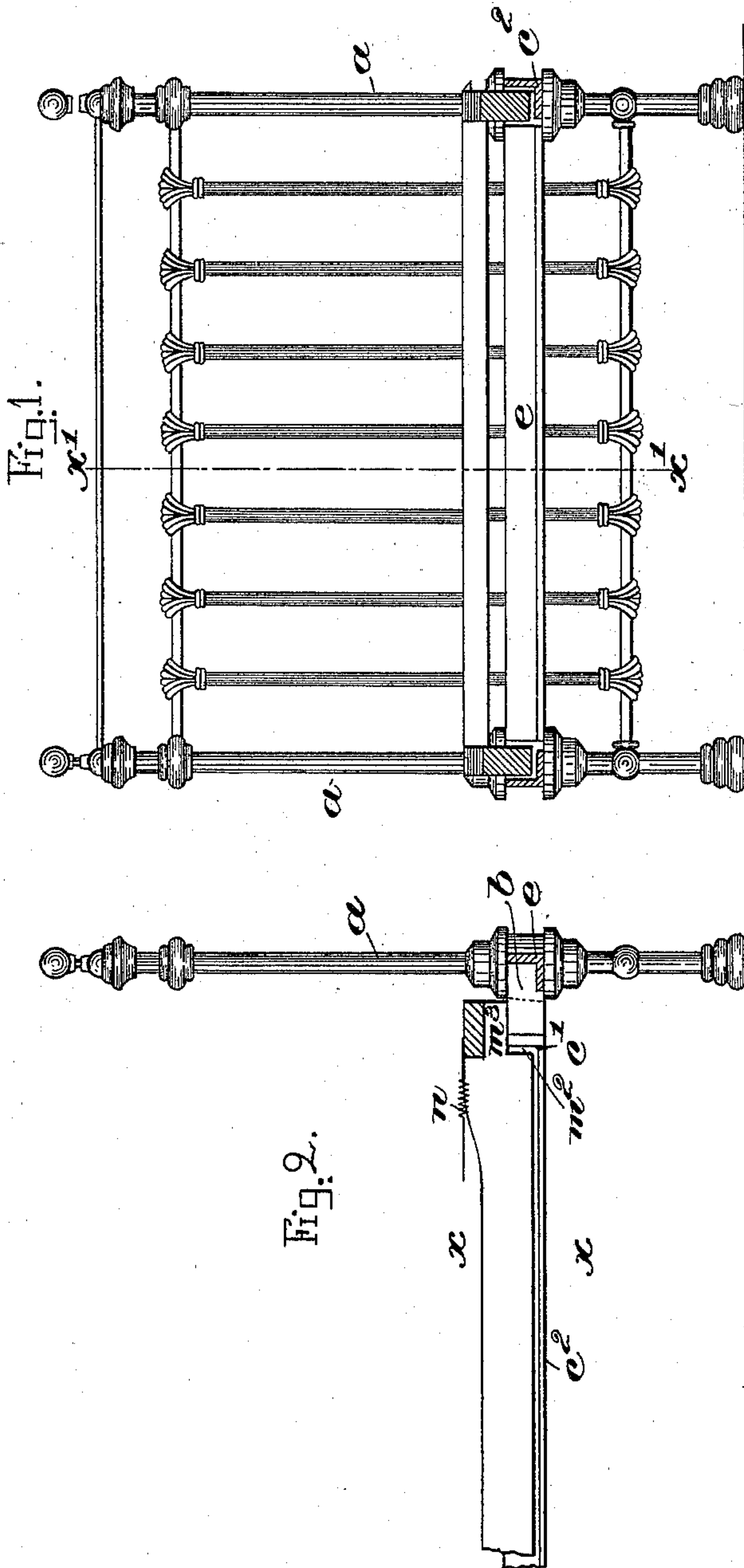


(No Model.)

F. G. GALE.  
BEDSTEAD AND MATTRESS FRAME THEREFOR.

No. 585,666.

Patented July 6, 1897.



Witnesses.

*W. C. Harmon*  
*Thomas Drummond*

Inventor.

*Francis G. Gale,*  
*by Crosby & Gregory*  
*attys.*



# UNITED STATES PATENT OFFICE.

FRANCIS G. GALE, OF WATERVILLE, CANADA.

## BEDSTEAD AND MATTRESS-FRAME THEREFOR.

SPECIFICATION forming part of Letters Patent No. 585,666, dated July 6, 1897.

Application filed August 24, 1894. Renewed December 10, 1896. Serial No. 615,230. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS G. GALE, a subject of the Queen of Great Britain, residing at Waterville, Province of Quebec, Dominion of Canada, have invented an Improvement in Bedsteads and Mattress-Frames Therefor, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to bedsteads, particularly metallic bedsteads, and to mattress-frames used in connection therewith, the object of my invention being to lighten and cheapen the construction of the same.

Prior to my invention the usual custom has been to construct bedsteads of four corner-posts joined by end and side rails and to sustain the mattress-frame by its side rails resting upon and throughout the entire lengths of the side rails of the bedsteads, making it necessary to construct the side rails of the bedstead from a material and of a size such as to sustain not only the weight of the mattress and its frame, but in addition thereto the weight of the person or persons resting upon the mattress.

Inasmuch as the four corner-posts must ultimately carry all the weight, it is desirable to so construct the bedstead and mattress-frame as to throw the weight of the mattress and any weight on and sustained by the latter as nearly as may be directly upon the said posts, in order to relieve the side and end rails from any weight to be sustained and to utilize the said end and side rails merely as connections to retain the bedstead in proper shape.

My invention therefore comprehends a bedstead comprising corner-posts, end and side rails joining the same, and mattress-frame supports at the opposite ends of said bedstead and adjacent and carried by said posts, in combination with a mattress-frame resting at its ends on and sustained by said supports, whereby the weight of the said frame and of a person or persons carried thereby is transferred directly to the said posts, thereby relieving said side and end rails from any weight to be sustained, as will be more fully hereinafter described.

Other features of my invention will be

hereinafter described, and set forth in the claims.

In the drawings, Figure 1 is a vertical cross-section of a bedstead and mattress-frame embodying my invention, the section being taken on the dotted line  $x x$ , Fig. 2; Fig. 2, a partial vertical longitudinal section taken on the dotted line  $x' x'$ , Fig. 1; and Fig. 3, a detail in perspective showing the preferred manner of sustaining the mattress at its ends upon the mattress-frame supports and the corner-posts.

Referring to the drawings, in the preferred embodiment of my invention there shown,  $a a$  are corner-posts of suitable construction, provided, respectively, with mattress-frame supports  $b b$ , integral with or suitably attached to the said posts.

In the present construction the supports  $b b$  are provided with dovetail sockets to receive the correspondingly-shaped projections  $c$  on the blocks  $c'$  at the opposite ends of the side rails  $c^2$  of the bedstead. These end blocks  $c'$  may be integral with or independent of and suitably attached to the said side rails  $c^2$ , and when in position with their projections locked in the sockets of the supports  $b$  the said blocks  $c'$  in effect form parts of the said supports, their dovetail projections sustaining them independently of the side rails, so that the latter may serve principally or entirely as connections joining and separating the corner-posts. The posts  $a a$  are also joined by suitable end rails  $e$ .

As herein shown, and preferably, the side and end rails  $c^2$  and  $e$  are formed from L-shaped or angle irons, which provide the greatest stiffness coupled with extreme lightness.

The mattress-frame  $M$ , composed of side and end rails  $m$  and  $m'$ , may be of suitable construction to fit and rest at its ends upon the supports  $b b$  of said frame, as herein shown, and preferably, having the ends of its side rails  $m$  cut away or recessed at  $m^2$  at their under sides to leave overhanging supporting-ears  $m^3$ , which rest upon the supports  $b$ , as best shown in Figs. 2 and 3.

A portion of a wire mattress  $n$ , of usual construction, is shown in Fig. 2, sustained at its ends upon the end rails of the mattress-frame, so that any weight upon the mattress



is transferred to and carried by the mattress-frame at its ends only, and as the ends of the mattress-frame are sustained upon and by the supports *b* it will be seen that the said weight is at once again transferred directly to the said supports and to the posts adjacent thereto, so that the side and end rails of the bedstead need sustain none of the weight whatsoever, they being shown in the drawing as free from contact with the side rails of the mattress-frame.

By making the side and end rails of the bedstead from angle-irons of suitable form, as shown in the drawings, the mattress-frame may be made to drop into the angle of the irons, so that the said angle-irons prevent lateral movement and displacement of the mattress-frame when in position.

I am aware that it is not new to construct a bedstead-frame from corner-posts connected by end and side rails of angle-iron and also to connect the said rails with their posts through the medium of dovetail projections and recesses, and therefore I do not herein seek to claim such a construction alone, but, so far as known to me, I am the first to conceive the idea of sustaining the mattress-frame at its ends only upon supports carried by the corner-posts, independent of the side and end rails, so as to transfer all weight directly to the posts and not through the intervention of the said side or end rails, whereby the latter may be made of sufficient stiffness and rigidity only to serve as connections to keep the bedstead in proper shape with the posts separated.

As stated in this specification, my invention is particularly useful in connection with metallic bedsteads, for it is well known that such bedsteads as at present constructed are expensive, so much so as to preclude their universal use, and they are also heavy.

By my invention the long side and end rails may be made considerably lighter, so that they are more easily transportable, and the cost of construction is also correspondingly reduced.

My invention is not necessarily limited to the particular constructional features shown.

I claim—

1. A bedstead comprising corner-posts, end and side rails connecting the same, and mattress-frame supports at the opposite ends of said bedstead adjacent and carried by the said posts, in combination with a removable rectangular mattress-frame resting at its ends upon said supports whereby the weight of said mattress-frame, together with any weight sustained thereby is transferred directly to the said corner-posts to thereby relieve the said side and end bedstead-rails from said weight, substantially as and for the purpose specified.

2. A bedstead comprising corner-posts, and end and side rails connecting the same, mattress-frame supports at opposite ends of the bedstead adjacent and carried by said posts, in combination with a removable rectangular mattress-frame resting at its ends on said supports, a mattress supported at its ends from and by the end rails of said mattress-frame, whereby the weight upon the mattress is taken by the ends of the mattress-frame and transferred thereby through the said supports directly to the said corner-posts, thereby relieving the side and end bedstead-rails from said weight, substantially as and for the purpose specified.

3. A bedstead, comprising corner-posts, and end and side rails connecting the same, mattress-frame supports at opposite ends of said bedstead adjacent and carried by the said posts, in combination with a mattress-frame composed of side and end rails, the latter recessed at their under sides at opposite ends to leave overhanging supporting-ears to rest upon and be sustained by said supports, whereby said side and end rails are relieved from the weight of the said mattress-frame and the weight carried thereby, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANCIS G. GALE.

Witnesses:

OLIVIA S. GALE,  
H. T. McLONG.