

Fig. 1.

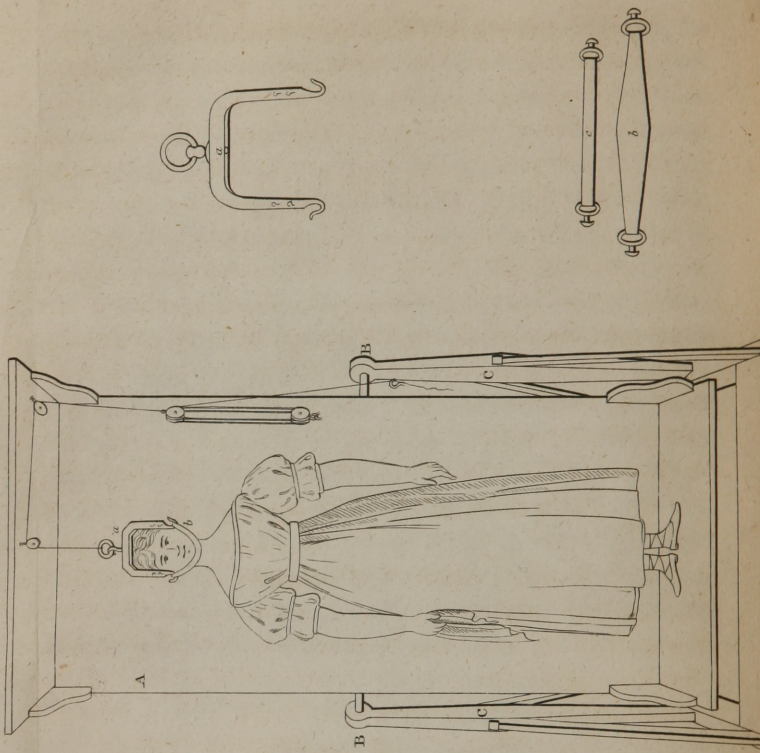
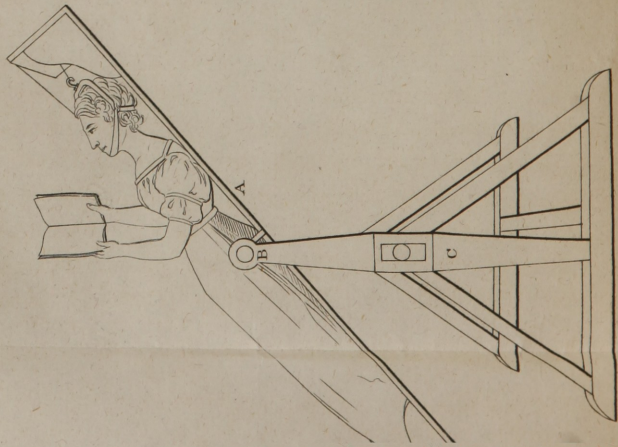


Fig. 2.



SPECIFICATION

OF A

PATENT

FOR AN APPARATUS DENOMINATED THE

D O R M A N T B A L A N C E ,

FOR THE

Cure of Crooked or Inflected Spine

IN THE HUMAN BODY.

GRANTED TO JAMES K. CASEY, Esq. OF NEW YORK.

*First issued June 23d, 1828, surrendered for the purpose of correcting
the specification, and re-issued January 21st, 1829.*

TO WHICH IS APPENDED

REMARKS BY THE EDITOR OF THE JOURNAL OF THE FRANKLIN INSTITUTE.

WITH A COPPERPLATE.

From the Journal of the Franklin Institute for June, 1829.



PHILADELPHIA:

.....
1829

SPECIFICATION.

THIS machine consists of a plane frame, the flat surface of which is about the size of a common mattress, and upon the longer edges of which, gudgeons, or centres, are fixed, at or near its centre of gravity. These gudgeons, or centres, are received into proper boxes, or bearings, on fixed supporters, the height of which a little exceeds the length of the frame. The frame, therefore, can revolve upon its gudgeons, or centres, as about an axis passing through it in the direction of its breadth. Upon the top of this frame, there is a bracket, from which is suspended, by a cord passing over a pulley, braces, and bandages, to be attached to the head of the patient.

The whole apparatus is shown in the annexed drawing and explanation.

The mode of operating with this apparatus, is as follows. The frame being brought into a vertical position, or nearly so, upon its gudgeons, the patient is made to stand with his back against the frame. The braces and bandages are then attached to his head, which is then drawn upwards by the cord passing over the pulley. By the direct gravitation of the lower part of the body, acting in opposition to the force by which the head is drawn upwards, the body is extended and the spine straightened. The force to be applied by the cord, must be varied according to the circumstances of the case; commonly about fifty pounds are required. After this extension has been continued from five to fifteen minutes, the frame should be gently turned upon its axis, till it is inclined about thirty-five degrees, and after remaining in this position from fifteen to twenty minutes, brought into the horizontal position. The suspending cord is then to be gradually slackened, which process should occupy about two minutes. The bandages are next to be removed, and the patient should continue in this position an hour, or sometimes even a longer time.

When the patient intends to remain long in the horizontal position, it will be necessary, previously to turning the frame as before described, to interpose between it and the patient, a mattress or other soft body, which at night forms the bed. It is always understood that

the patient sleeps upon the balance. The foregoing operation should be repeated from day to day, twice or three times a day, until the distortion disappears. Various exercises are used for the purpose of strengthening the muscles; as the roll-spring rotatory motion, stick-exercise, &c. &c. These are to be used previous to extension, and as often during the day as convenient to the patient. After *all* exercises the patient must rest in a horizontal position. In the morning cold affusions of water impregnated with salt, either applied to the part affected or generally, are to be used, after which, rubbing and chamoosing should be resorted to.

In the preceding specification I have, for the purpose of making the application of my improvement more clearly understood, described with it certain instruments and parts which do not belong to this invention. Therefore, I hereby declare my invention, for which I claim letters patent, to consist in the combination and arrangement of the moveable frame with its supporters, and in making the braces and bandages to correspond with the motion of the head and the exercise of the arms and body, and thus, without danger or exposure to accident, providing for making an extension of the spine, when the patient is in a standing position; by which the extending force is counteracted by the whole weight of the body; and also providing for changing the position of the patient, from standing to recumbent, without removing him from the machine. JAMES K. CASEY.

Explanation of the Plate.

Figures 1 and 2 represent different positions of the apparatus, which can also be readily placed horizontally, in which case tressels, or horses, may be placed under the ends of the frame.

A, the moveable frame, suspended by

B, B, the gudgeons.

C, C, the supporters.

a, b, c, braces and bandages to be applied as shown in the drawing, which also exhibits the manner in which the pulley acts.

Remarks by the Editor.—In our list of patents for June last, we noticed this invention, and subsequently published the original specification. The patentee soon found that this specification was defective; he, therefore, surrendered his patent, which was re-issued with the foregoing description.

In our previous notices of Mr. Casey's apparatus, we have spoken of it in very favourable terms. The opinion which we entertained, received a very powerful support from the unqualified terms of approbation in which a very distinguished physiologist had expressed his conviction of its value; our intimate acquaintance with the individual to whom we referred, justified the confidence with which his judgment was received. Since that period, the instrument has been applied in a number of cases with the most perfect success.

We with pleasure enter more into detail respecting this apparatus than we usually do with patents, because we feel that the subject is one of great interest in itself, and more particularly so, as it relates to the cure of a complaint, the sufferers from which are numerous, and to which those whom nature has cast in her finest mould, are the most frequently subjected. We believe that the patentee has supplied what was, until now, a great desideratum in medical mechanics. With the inventor we have no personal acquaintance, and in the invention we have no interest but that of humanity. We have corresponded with Mr. Casey, and with others, upon the subject, and we are authorized to say that doctors Cheesman, D. W. Kissam, jr., D. Kay, and George Wilks, of New York, who professionally visited the British isles, and the continent of Europe, have awarded to Mr. Casey's method of treatment, a character of decided superiority over any thing which they have elsewhere witnessed. We are also assured that every practitioner of eminence who has carefully examined its operation, has concurred in the same opinion; and are informed that upon this united testimony, a gentleman of talents, and of the most respectable connexions, has taken the apparatus to Europe.

The late deeply and justly lamented Dr. King, son of the Hon. Rufus King, pronounced the Dormant Balance the *only* machine which, in his judgment, could effect a cure; as, by it, the power which is necessary to accomplish the object, *permanently*, may be applied, with perfect ease and security to the patient.

We deem it unnecessary to give the very long array of the names of distinguished practitioners with which we have been furnished, whose opinions are altogether approbatory, but we add an extract of a letter to Mr. Casey, from the pen of a very learned and reputable physician in Boston, who has distinguished himself by his physiological disquisitions in a valuable journal of which he is the editor.

“ My opinion, as you are aware, must be founded partly upon the

knowledge which I have of the cases in which it has been employed, and partly upon general reasoning with regard to the effect of such an application upon the human body. Without having seen a single case, I should have judged that your apparatus, if made use of for a sufficient length of time, and upon a person not too far advanced in life, would generally effect a cure. After having seen it applied in two cases repeatedly, and in a third once, I am ready to say that the *immediate* influence exerted upon the curved spine, is greater than I should have anticipated; and that the *permanent* change produced in the *shape* and *height*, is such, even after the short period during which the machine has been applied, as fully to confirm the opinions I had formed. In short, all that I have seen and known, leads me to believe that your method is superior to any known, and that, if persevered in, with the use of the proper means for preserving and improving the general health, it will prove successful in all but the most aggravated cases."

Mr. Casey has used his apparatus extensively in the cities of New York and Boston, and is now in Philadelphia.

In publishing patents for things appertaining to the healing art, we rarely feel any sensation but that of disgust at the facility with which quacks impose their nostrums upon the community, and increase the evils which they propose to cure; but in cases like the present, the instruments speak for themselves, and the judgment, not the credulity, is addressed.

