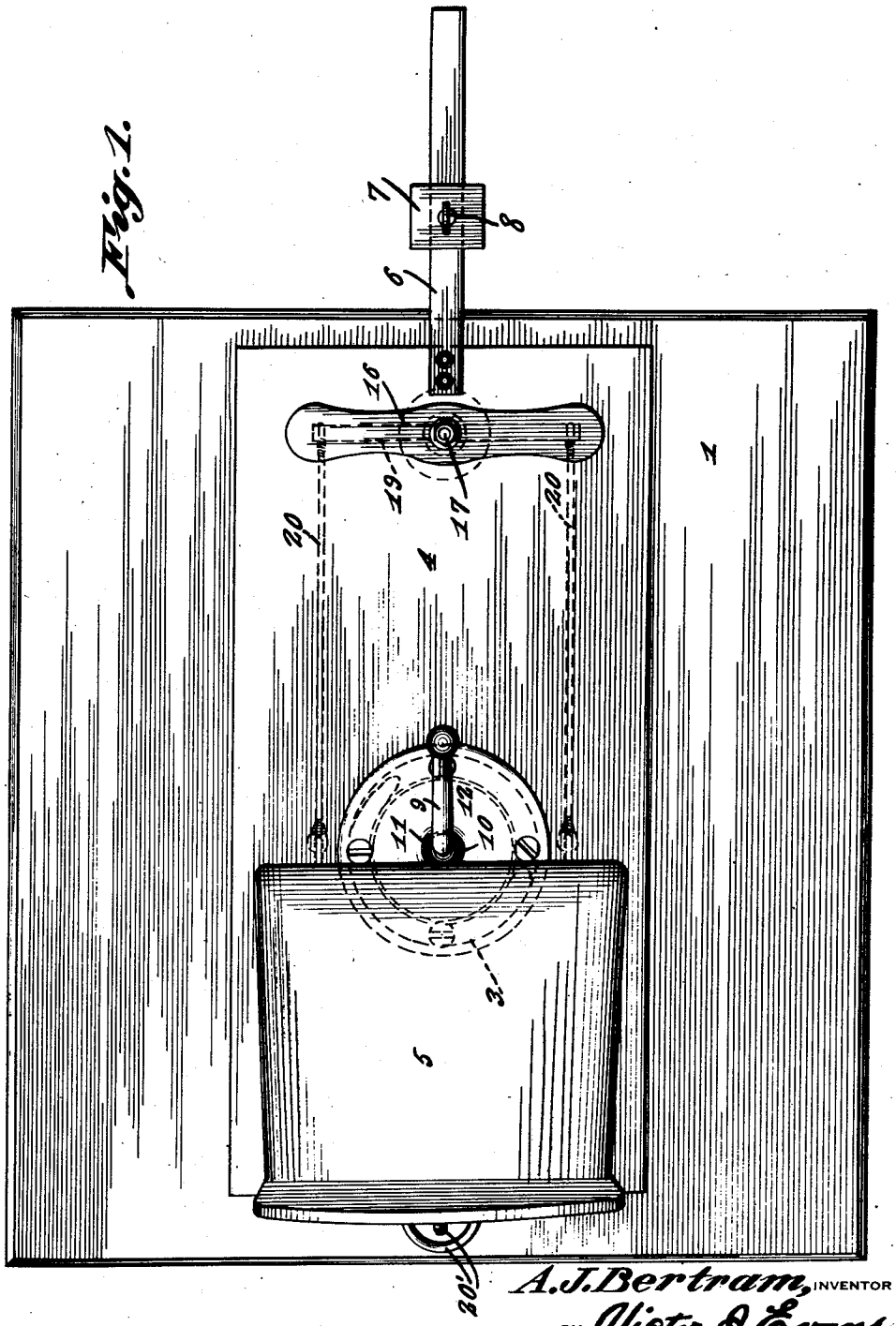
Aug. 26, 1930. A. J. BERTRAM 1,773,936

APPARATUS FOR HOME FLYING INSTRUCTIONS

Filed April 19, 1929 2 Sheets-Sheet 1

Fig. 1.



A. J. Bertram, INVENTOR

BY Victor J. Evans

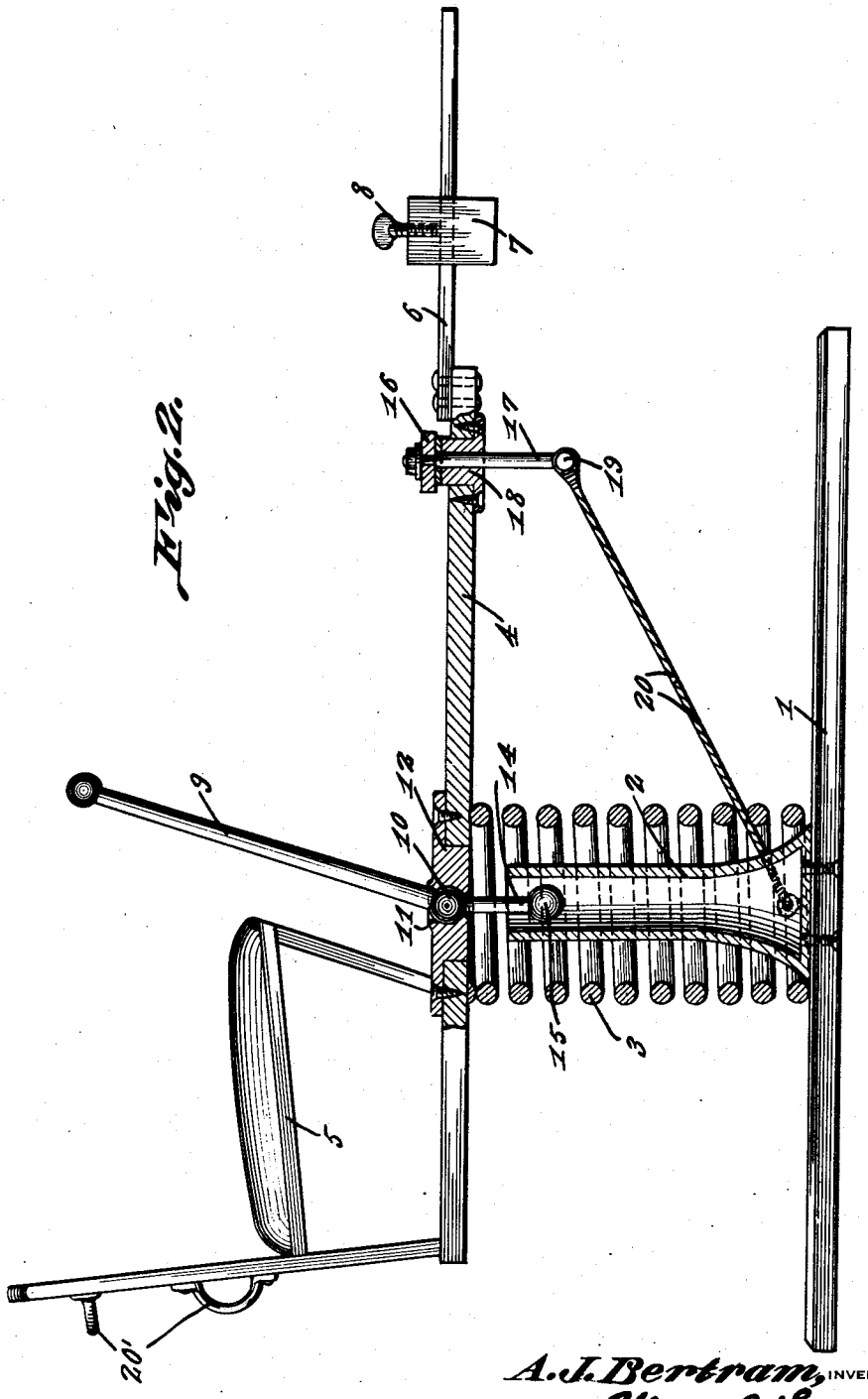
ATTORNEY

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Fig. 2.



A. J. Bertram, INVENTOR

BY Victor J. Evans

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Patented Aug. 26, 1930 1,773,936

UNITED STATES PATENT OFFICE

ALBERT J. BERTRAM, OF MIAMI, FLORIDA

APPARATUS FOR HOME FLYING INSTRUCTIONS

Application filed April 19, 1929. Serial No. 356,474.

This invention relates to an apparatus for facilitating the teaching of the art of flying, the general object of the invention being to provide a resiliently supported platform having a seat thereon, with a lever pivotally arranged in the platform adjacent the seat and engaging a member in such a manner that movement of the lever will cause movement of the platform, said lever simulating the control stick of an aeroplane, with a bar pivotally arranged on the platform and simulating the rudder bar of an aeroplane, with means whereby the movement of the bar by the feet of one sitting on the seat will move the platform horizontally whereby the manipulation of the lever and the foot bar will teach one to coordinate certain muscles of the arms and legs. The device also develops a sense of equilibrim or balance.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a plan view of the device.

Figure 2 is a longitudinal sectional view through the device.

In these views, the numeral 1 indicates a base and 2 indicates a tubular upright or post having its lower end fastened to the base. A heavy coil spring 3 encircles the post and has its lower end resting upon the base, the spring being of a height greater than the upright. A platform 4 rests upon the upper end of the spring and may be secured thereto if desired, the spring holding the platform upon the upper end of the post in a manner to permit forward and rearward and lateral tilting of the platform, and as shown, the point at which the platform engages the spring is arranged closer to one end of the platform than the other. A seat 5 is fastened to the short end of the platform and a bar 6 is fastened to the other end thereof, a weight 7 being adjustably connected with the bar through means of a set screw 8 so that this weight can be set to counterbalance the weight of a person occupying the seat 5.

A lever 9 has a spherical member 10 at its lower end which engages a spherical socket 11 in a plate 12 which has a portion passing through a hole in the platform above the post, the plate being suitably connected with the platform. The lever has a depending extension 14 which has a spherical member 15 at its lower end for engaging the interior walls of the post so that when a person in the chair manipulates the lever, the spherical member 15 contacts a part of the interior wall of the post and thus the platform can be rocked on the spring so as to lower one end and raise the other end of the platform or vice versa. This lever simulates the control stick of an aeroplane. A foot bar 16 is fastened at its center to a vertical shaft 17 which passes through a bearing member 18 carried adjacent the front end of the platform and a bar 19 is fastened at its center to the lower end of the shaft. Each end of this bar 19 is connected by a cable 20 to the base, adjacent each side of the post. The foot bar 16 simulates the rudder bar of an aeroplane.

Thus it will be seen that when a person occupying the chair seat 5 manipulates the lever, he can tilt the platform on the spring and then by manipulating the foot bar with his feet, he can turn the platform in a horizontal plane in one direction or the other, the two actions simulating the control of an aeroplane by the control bar and rudder bar. Thus the device can be used for teaching the art of flying at home and it will teach one to co-ordinate certain muscles of the arms and legs so that one can train such muscles without flying in a plane, which is very expensive. The apparatus also develops a sense of equilibrium or balance.

Handles 20′ are attached to the back of the seat, at different angles, thus enabling a second person to move the platform.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be

made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:—

An apparatus of the class described comprising a base, a tubular post having a flared base mounted upon the base, a helical spring disposed to surround the post and having its lower end resting upon the base and fitting about the flared lower end of the post, the upper end of the spring extending above the upper end of the post, a platform mounted adjacent one of its ends upon the upper end of the spring, a seat upon the platform at the said end thereof, an approximately spherical socket upon the platform in front of the seat and above the upper end of the post, a hand lever having a ball adjacent its lower end fitting in said socket to support the hand lever for universal angular adjustment, the lever, below the ball, extending downwardly within the upper end of the post and provided with a spherical head for engagement with the inner surface of the said post, the portion of the lever, above the ball being extended at an obtuse angle with respect to the lower portion of the lever, the lever constituting means whereby the platform may be tilted in any selected direction with respect to the axis of the post, a bearing mounted at the front of the platform, a vertical shaft rotatably mounted in the bearing, a foot bar fixed midway its ends to the upper end of the shaft, a cross bar fixed, intermediate its ends, to the lower end of the shaft, and cables connected at their forward ends to the ends of the cross bar and at their rear ends to the base at opposite sides of the post.

In testimony whereof I affix my signature.

ALBERT J. BERTRAM, M. D.