

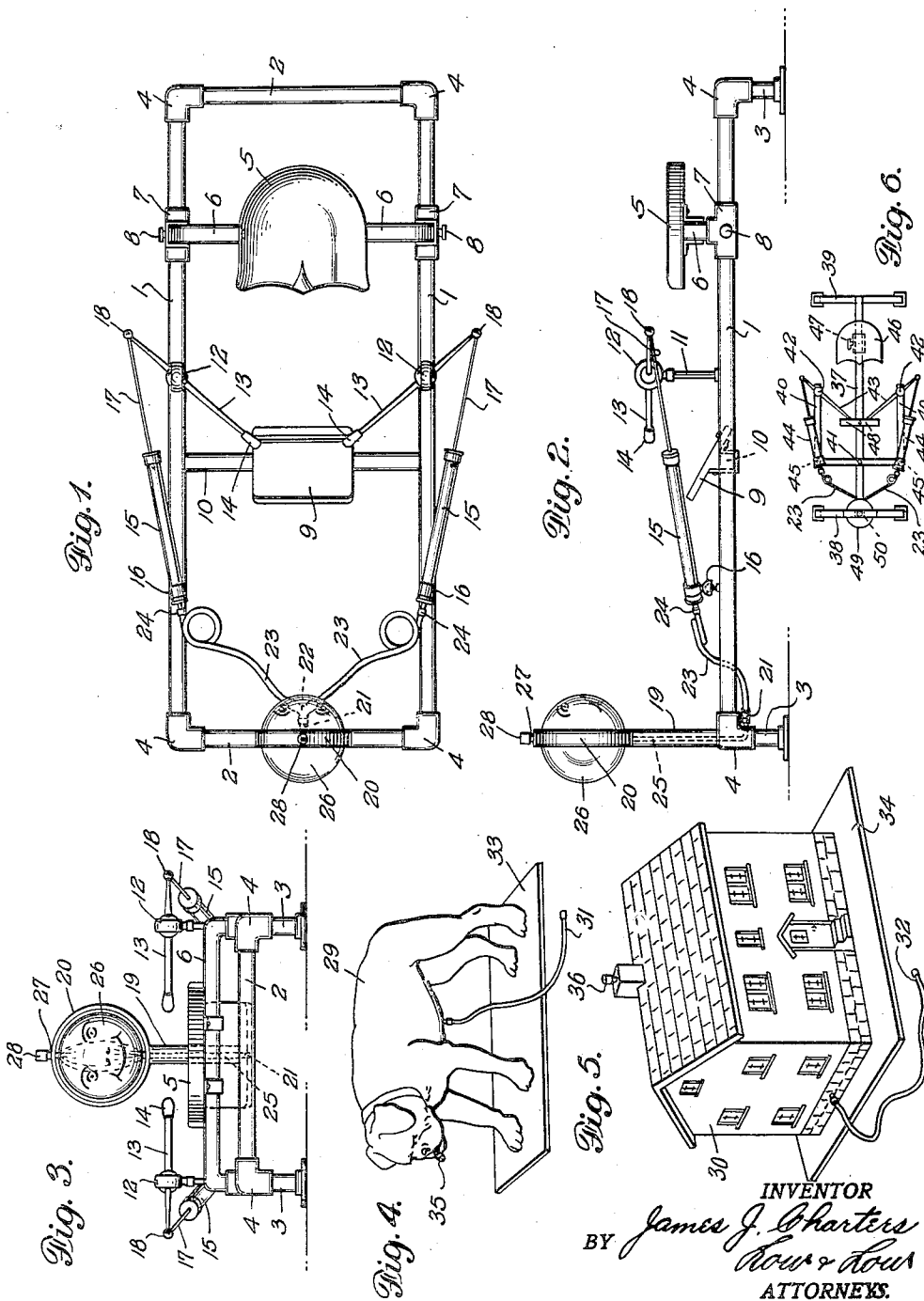
July 17, 1934.

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1,966,848

COMBINED EXERCISING AND AMUSEMENT DEVICE

Filed April 17, 1934



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UNITED STATES PATENT OFFICE

1,966,848

COMBINED EXERCISING AND AMUSEMENT
DEVICE

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Application April 17, 1934, Serial No. 721,031

10 Claims. (Cl. 272-72)

The invention relates to a combined exercising and amusement device and has for its objects to provide certain new and useful improvements in apparatus of this character.

5 An important object of the invention is to provide an exercising device or machine especially designed to improve the physical condition and muscular development of children, wherein means are provided to render the use of the
10 device attractive to the child, thereby rendering it unnecessary to employ persuasion or coercion to induce the child to make use of the apparatus.

As is well known the problem of affording the opportunity for physical exercise to children,
15 especially those in an undernourished or a pathetic condition, especially where weather conditions are such as to preclude beneficial outdoor exercise, is a serious one to parents. Unless the element of amusement is combined with
20 the opportunity for healthful exercise, it is very difficult to induce children to indulge even moderately in muscular exercise intended to bring about their physical betterment. This is particularly true where the child is of tender
25 years and is attracted solely by conditions which afford amusement.

It is further well known that children are especially amused when their exertions result in sudden noises and their natural tendency is
30 to produce such noises or unusual effects even when a considerable amount of physical exertion is required to bring about this result.

It is an important object of this invention to direct the described and inherent inclinations
35 of children along useful and healthful lines to insure sturdy development.

A further object of the invention is to provide an apparatus of the character described which is composed of few parts capable of economical manufacture, and which is designed to
40 resist hard usage without the necessity for frequent repairs or replacement. The device is further designed and constructed so as to be automatic in operation and capable of repeated
45 use without requiring the attention of the child or others to insure continuous and efficient operation whenever it is placed in service.

A still further object is to provide a device in which the element of amusement is capable
50 of convenient interchangeability to afford diversified amusement or a variety of attractions for the child.

With such objects in view as well as other useful advantages which may be incident to the
55 improvements, the invention consists in the

parts and combinations hereinafter set forth and claimed with the understanding that the several necessary elements constituting the same may be varied in proportions and arrangements without departing from the nature and scope
60 of the improvements.

In order to make the invention more clearly understood there are shown in the accompanying drawing means for carrying the invention into
65 practical effect, without limiting the improvements in their useful operations to the particular construction which for the purpose of explanation, has been illustrated.

In said drawing:

Figure 1 is a plan view of a combined exercising and amusement device or machine constructed in accordance with a preferred embodiment of the invention.

Figure 2 is a side elevation of the machine.

Figure 3 is an end elevation of the same.

Figure 4 is a detail view in perspective of an interchangeable amusement device designed to be used in conjunction with the machine.

Figure 5 is a similar view of another replaceable element for the machine.

Figure 6 is a plan view of a slightly modified form of the invention.

Referring to the drawing, the device is illustrated as comprising a rowing machine the use of which promotes physical and muscular development in the child, especially in the chest, back and arm muscles as well as in the waist portion. Such a rowing machine comprises the usual frame structure including side bars or rails 1, end bars or members 2 and legs or supports 3.
80 The described elements may be constructed of any suitable material of any preferred form but are illustrated as consisting of metal pipe sections connected by suitably disposed elbow joints or members 4, which may be conveniently assembled and dismantled to provide a rigid unitary structure. A seat 5 is mounted on a transverse brace member 6 in turn secured at its opposite ends to hollow sleeve members 7 which are slidably mounted on the longitudinally disposed
100 rails 1. A set screw 8 in each sleeve member is provided to afford convenient adjustment of the seat on the frame to adapt the device for children in various stages of physical development. A foot rest 9 is mounted on a second transverse brace member 10 extending between the side rails of the frame in the desired longitudinal relation to the seat 5 and the frame further preferably includes a pair of vertically disposed
105 pedestal supports 11, one at each side of the

machine, each pedestal support having a ball and socket connection 12 at its upper end.

A pair of oar members 13 having handle grips 14 are each mounted intermediate their ends in one of the ball and socket members 12 to provide universal and independent movement of the oars in any desired plane relative to the stationary frame. An air pump cylinder 15 is preferably provided for each oar member on opposite sides of the frame, the cylinder being secured or attached to its respective frame member 1 by a ball and socket or universal mounting indicated at 16. The usual piston rod 17 of each air pump cylinder 15 is secured at its outer end by a suitable universal joint 18 to the outer end of its respective oar member 13.

The end frame bar 2 at the front of the machine is provided with a median upright hollow post or standard 19 terminating at its upper end in an annular support or ring member 20. A boss or nipple 21 is secured to and substantially centrally of the forward hollow frame bar 2, said nipple 21 being designed to receive a resilient or other two-way connection 22 having diverging arms communicating respectively with a pair of flexible pipe or hose connections 23, the latter being secured at their opposite ends as at 24 one to each pump cylinder 15. The nipple 21 is also communicably connected to a suitable pipe connection 25 housed within the standard 19, the upper end of said pipe connection communicating with an inflatable amusement device, illustrated herein as comprising a resilient balloon member 26 housed within the annular retaining ring 20. The upper portion of the balloon member communicates with and includes a pipe connection 27 mounted in the ring member 20, in turn communicating with a combination pressure control valve and noise making device generally indicated at 28. The device 28 may be adjusted to emit a whistling, squawking, popping, resonant or other discordant noise when the air pressure within the inflatable balloon member 26 reaches a predetermined pressure which is governed by adjusting the said valve member 28, which pressure is preferably below that required to burst the balloon member. Preferably the latter is decorated painted to resemble a face which assumes different contortions and grimaces during various stages of inflation, such decorative matter being disposed immediately in the line of vision of the child who is operating the device and which will afford the desired amusement to the former and encourage the child to energetically operate the rowing machine to bring about such visual changes and popping or other noise in the amusement device with obvious beneficial physical results.

The mode of operation of the device will be obvious. The seat member 5 is adjusted to the stature of the child who takes his position thereon with the desire to actuate the amusement and noise making device 26 disposed directly in his line of vision. The child grasps the handles of the oar members 13 and actuates the same individually or simultaneously as in the act of rowing. The stationary seat, as distinguished from a movable or sliding seat, necessitates the full application of the muscles required to operate the mechanism and the pistons in the pump cylinders 15 insure the proper and desired resistance to bring about the intended muscular development. As the rowing operation continues air pressure is continuously

imparted to and built up within the inflatable member 26 which is originally in the normal deflated position indicated in dotted lines in Figure 3. As the air pressure is built up the balloon member 26 expands and the child is initially amused by the facial contortions which are successively assumed by the balloon member. As soon as the desired air pressure is built up, which pressure is commensurate with the muscular ability of the child, such pressure is suddenly released with a popping or squaking noise through the pressure control valve 28, which also includes in its construction the noise making implement. This culmination of the rowing operation affords additional amusement to the child and is the result of relatively protracted muscular exertion which inures to the physical betterment of the child. It will be understood that the combined pressure control valve and noise making device 28 may be manually or automatically released after inflation to quickly deflate the balloon member 26, thereby exhausting the air pressure built up by the pump members 15 and rendering the apparatus immediately available for repeated use. If the inflatable member 26 is not manually or automatically deflated as described the pressure will gradually subside by leakage through the pump pistons until eventual deflation is obtained without manual attention.

Once the child is informed that a discordant sound or other noise will result from inflating the balloon member to the desired degree, he will bend every effort on repeated occasions to achieve this result without persuasion or coercion on the part of his parents, and the desired physical exercise of the child is obtained without undue effort.

The universal mounting of the pump cylinders 15 and oar members 13 permit the apparatus to be operated in a flexible and natural manner as during actual rowing, and furthermore adequately lends itself to any physical deficiencies or limitations possessed by the operator, such as the tendency to stress one arm more than the other or in different planes of movement.

In order to render the device more diversified and attractive to the operator the invention contemplates interchange of the inflatable noise making implement illustrated as comprising the balloon member 26. Figures 4 and 5 illustrate alternate or replaceable objects 29 and 30 of rubber or the like, which are designed to be substituted when desired for the balloon member 26 of the apparatus. In order to accomplish such replacement it is merely necessary to detach the two way connection 22 from the nipple 21 and attach the former to either flexible pipe 31 or 32 of the objects illustrated in Figures 4 and 5 respectively. These latter devices are illustrated in inflated position and are preferably provided with relatively rigid base portions 33 and 34 to adapt these elements to be positioned on the floor within the range of vision of the child adjacent the front of the apparatus. Each of the replaceable devices in Figures 4 and 5 is also equipped with a combined noise making device and pressure control valve 35 and 36 respectively to render these devices operative in the same manner as the balloon 26.

It will be understood that the several illustrated embodiments of inflatable objects which are combined with noise making devices for the

purpose described, are merely suggestive of various devices of different shapes and contours which may be provided for the purpose to accomplish the general results obtained by the invention. It will be further obvious that the entire apparatus is of such nature as not to require attention in operation and will not require attention even with rough usage.

While the invention is illustrated as including an inflatable member and a noise making device, it will be understood that either of these devices may be eliminated, and the air pressure employed to actuate either or both of such devices or their equivalent.

Figure 6 illustrates a modified construction which may be more economically manufactured. The essential elements of the invention are, however, retained. Instead of a rectangular frame a single central longitudinal truss or frame member may be substituted as indicated at 37 in Fig. 6. Front and rear leg supports are shown at 38 and 39 and are suitably secured to the central truss. A U-shaped frame member indicated at 40 is centrally secured as at 41 to the frame 37, the opposite leg portions of the U-shaped member having ball and socket connections 42 to provide a universal mounting for the oar members 43. The outer ends of the oar members have a similar universal connection with the piston rods of the air or pump cylinders 44 which are indicated as having a universal mounting 45 at their inner ends on the U-shaped member 40. The seat member 46 is illustrated as having an adjustable mounting 47 on the central frame member 37. A pair of foot rests or stirrups 48 are secured in any suitable manner on opposite sides of the frame 37. The inflatable balloon member or noise making device, or both, is indicated generally at 49 and is supported within the vision of the operator as by means of a central pedestal 50 which may constitute an upturned integral extension of the frame member 37. The general construction of said support 50 is similar as indicated in and described with reference to the remaining figures and the air connections from the pump cylinders may be substantially similar to those heretofore described.

What I claim is:

1. An apparatus of the character described, comprising an exercising device and an amusement device associated therewith and operable by fluid pressure developed by said exercising device.

2. An apparatus of the character described comprising a rowing machine and an inflatable amusement device connected to and operable by said rowing machine.

3. An apparatus of the character described comprising an exercising device and an inflatable noise-making amusement device connected to and operable by said exercising device.

4. A combined exercising and amusement device comprising a rowing machine and a noise making implement operatively secured thereto, whereby continued operation of said rowing machine actuates said noise making implement.

5. A combined exercising and amusement device comprising a rowing machine and an inflatable noise making implement operatively secured thereto, whereby the operation of said rowing machine builds up air pressure in said noise making implement and actuates the same when a predetermined air pressure is reached.

6. A combined exercising and amusement device, comprising in combination: a frame support, a stationary seat adjustably mounted on said support; a foot rest secured to said support, oar members having a universal mounting on said frame; pump cylinders having a universal mounting on said frame, pump pistons secured at their outer ends to said oar members, an inflatable noise-making amusement device mounted on said frame, and flexible connections from said pump cylinders to said amusement device whereby the latter is inflated and actuated by the actuation of said oar members.

7. An apparatus of the character described, comprising in combination; a frame support, a seat on said support, a foot rest secured to said support, oar members pivotally mounted on said support, pump cylinders pivotally mounted at one end on said support, pump pistons within said cylinders and secured at their outer ends to said oar members, an inflatable amusement device mounted on said frame, and connections from said pump cylinders to said amusement device whereby the latter is inflated by the actuation of said oar members.

8. An apparatus of the character described, comprising in combination a frame support a seat on said support, a foot rest secured to said support, an oar member universally mounted on the frame, a pump cylinder universally mounted on said frame and having a piston secured at its outer end to said oar member, an inflatable amusement device mounted on said frame, and a connection from said pump cylinder to said device whereby the latter is inflated by the manipulation of said oar member.

9. An apparatus of the character described, comprising an exercising device, pump cylinders connected to said exercising device, and an inflatable amusement device communicably connected to said pump cylinders and operable to be inflated by the actuation of said exercising device.

10. An apparatus of the character described, comprising an exercising device, an inflatable amusement device operable thereby said amusement device being further operable to emit a noise after being inflated to a predetermined degree

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