

Dec. 12, 1939.

A. E. BRANDON

2,183,345

BOAT FOR EXERCISES

Filed Jan. 21, 1939

3 Sheets-Sheet 1

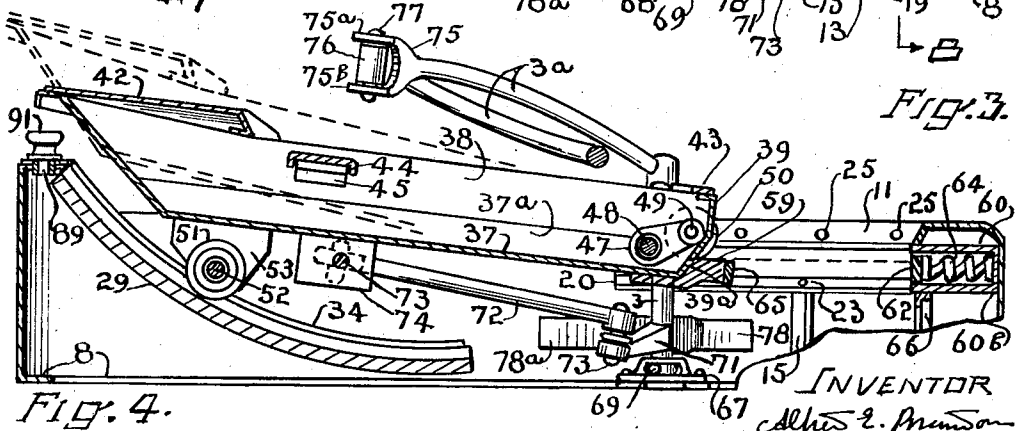
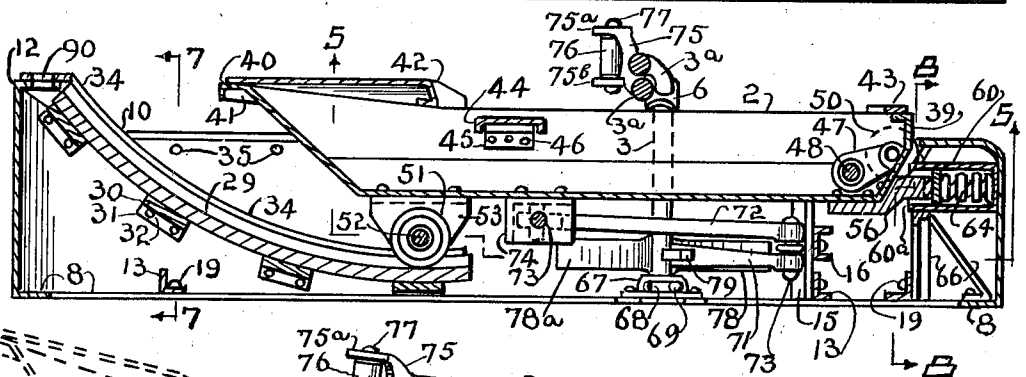
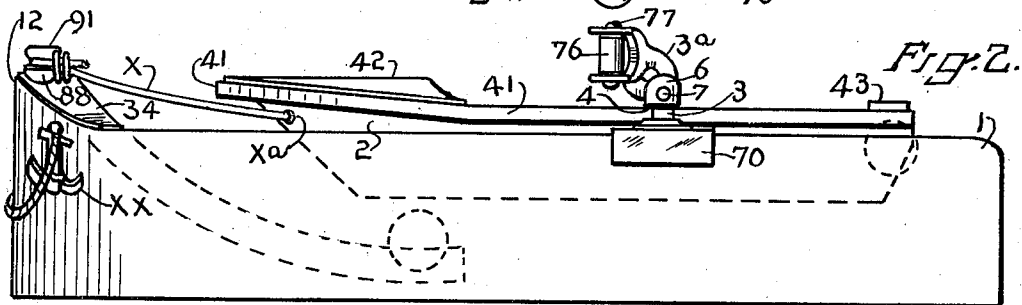
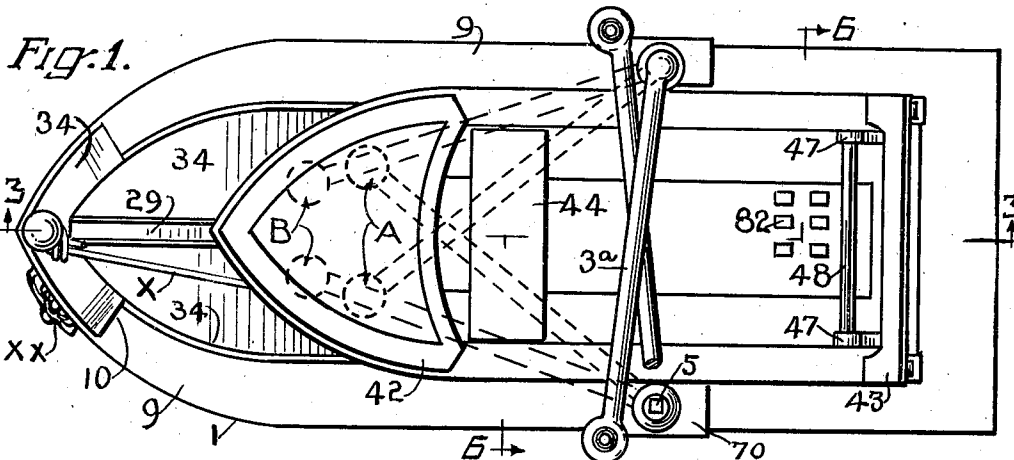


Fig. 4.

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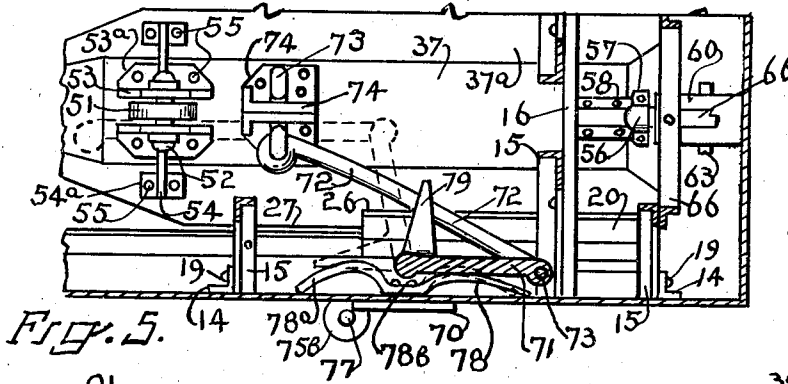


Fig. 5.

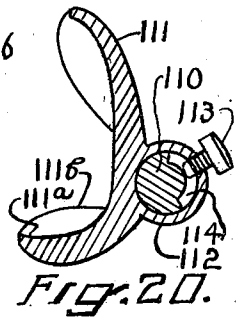


Fig. 20.

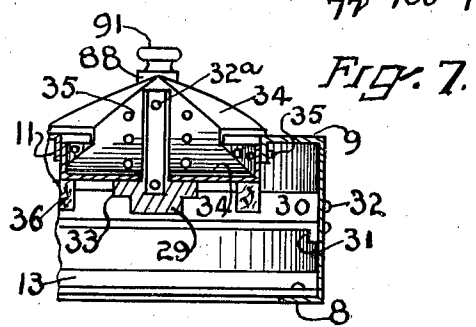


Fig. 7.

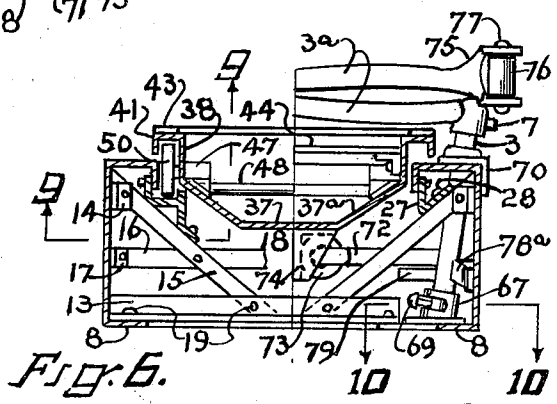


Fig. 6.

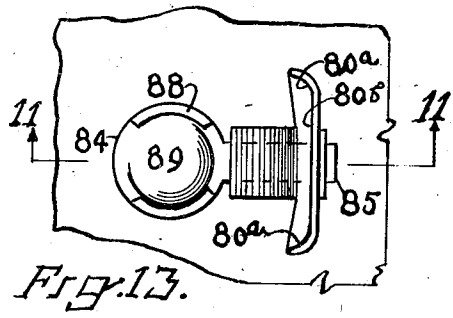


Fig. 13.

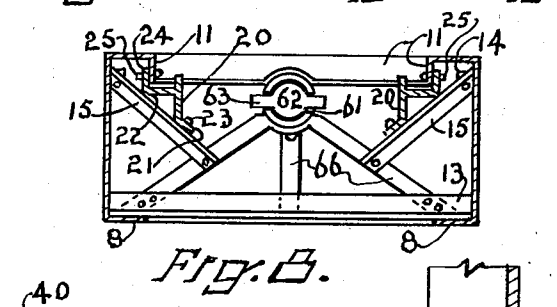


Fig. 8.

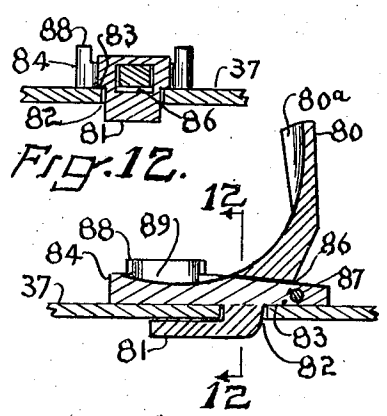


Fig. 11.

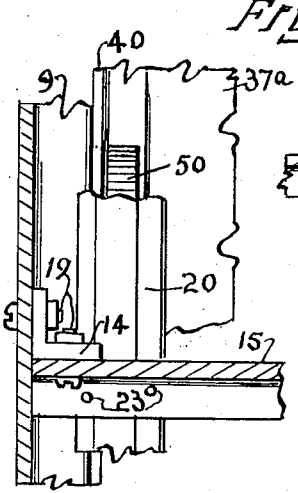


Fig. 9.

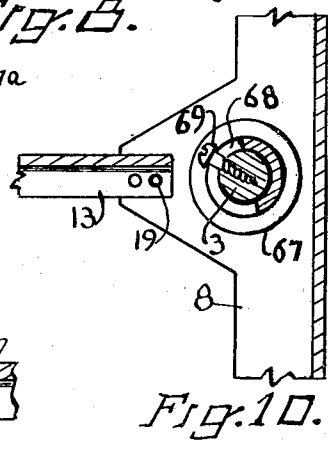


Fig. 10.

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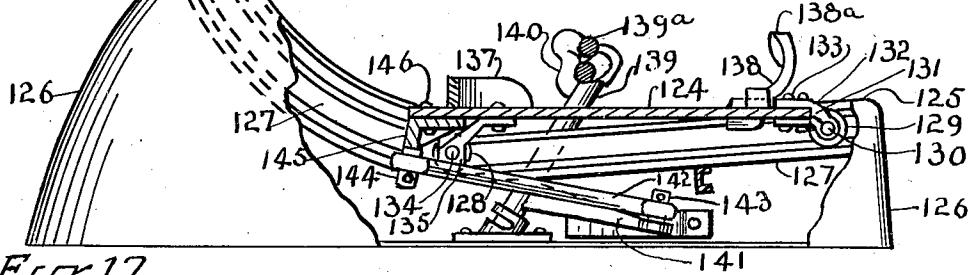
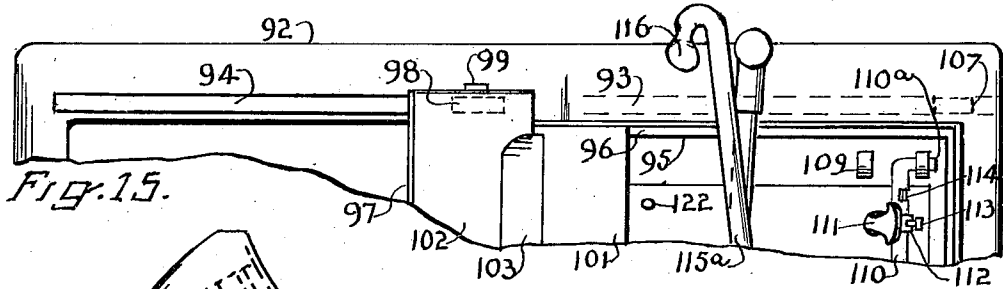
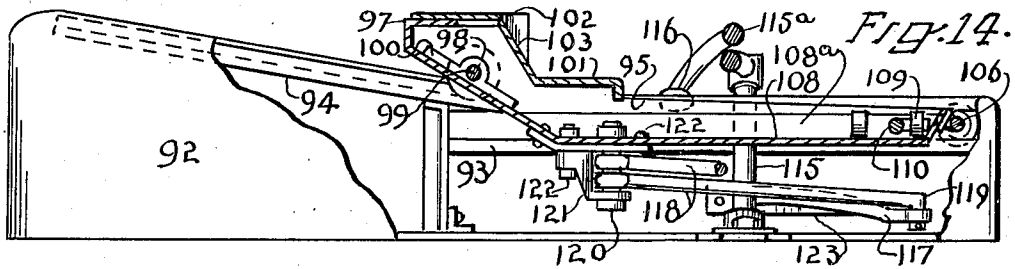


Fig. 17.

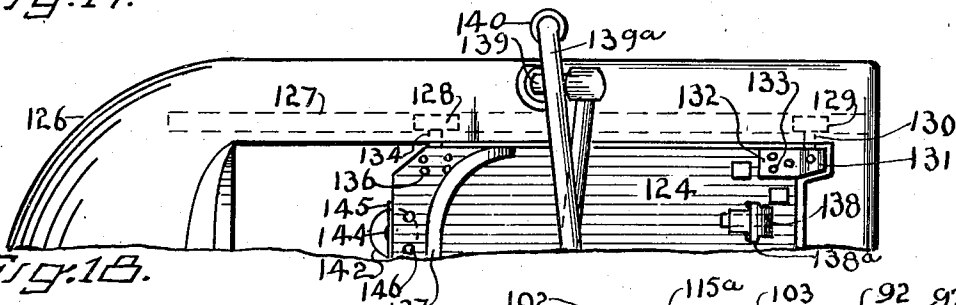


Fig. 18.

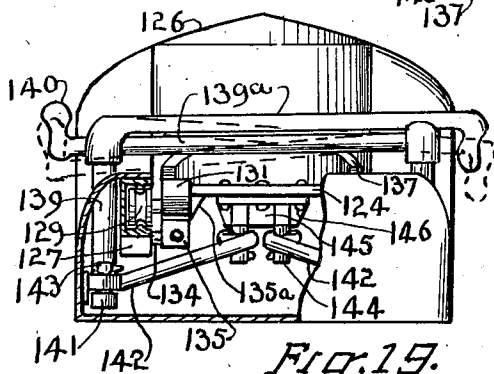


Fig. 19.

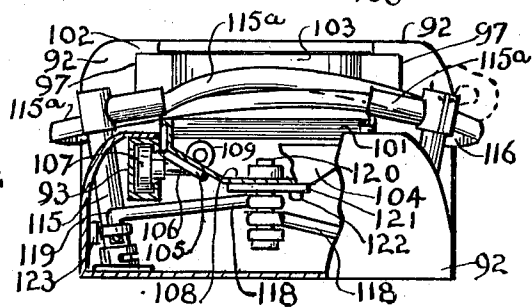


Fig. 16.

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2,183,345

BOAT FOR EXERCISES

Alfred E. Brandon, New York, N. Y.

Application January 21, 1939, Serial No. 252,145

15 Claims. (Cl. 272-72)

This invention relates to exercising devices and more particularly to the type possessing the characteristics of a rowboat for the physical development of the human body.

5 Heretofore devices of this type are movable on a horizontal track, guide or the like and, afford but straight or unaltered movements; thus in such movements the muscular and physical development of the human body, although possibly
10 being stimulated, leaves no actual soothing effect to the nervous system and so it gradually becomes monotonous for users, because their mind as well as their nerves are not completely satisfied by such movements; and therefore, one of the principal objects of this invention is to make a curved
15 or angular track, guide or the like which affords means, first, for variation of movements in respect to the longitudinal axis of the device and thus bring about a definite result of soothing and stimulating the nerves similar to that experienced
20 when operating an actual rowboat; second, for an ever existing resistance unlimited against the muscular prowess of any user and, third, for gradually increasing the muscular prowess of any
25 user, without any additional parts and their necessary adjustments therefor.

Another object of this invention is to make, in conjunction with the said track, guide or the like, a new and novel base or hull element which
30 affords means, first, for engagement with a movable deck portion or member which carries user; second, for concealing the cooperative operative parts embodied in this invention and, third, for simulating an actual boat.

35 Another object of this invention is to make said deck portion or member adaptable to all users and to be also in conformity with the design of the associated hull member.

A further object of the invention is to make,
40 in conjunction with said track, guide or the like, the hull element and deck member, new and novel oar elements which afford means for positively increasing the muscular development of the hands, arms and chest of users and also enhance
45 the design of the device.

Another object of this invention is to make tie-rods integral with the oar elements and which affords means for smooth and noiseless operation of this device and also prevent accidental slip-
50 page, misarrangement or displacement usually encountered with chains, cables or the like flexible line which are heretofore being employed.

Still another object of this invention is to provide shock absorbers which further assure noiseless operation between the hull and associated

deck member when the oar elements of the device is being moved about.

A further object of this invention is to provide new and novel foot members or pedals which are adjustably mounted on the movable deck member
5 and, which afford means for unlimited positions in respect to a seat portion, thus physical development of the legs of occupant is not limited longitudinally nor transversely in respect to the
10 longitudinally axis of the deck member.

Still a further object of this invention is to provide a device of the character described facilitating muscular development of the entire body of the user, when in forward and also retarding
15 movements and perfecting coordination between the nervous system and body.

Still a further object of this invention is to make a device of the character described which is extremely attractive in design and to meet the
20 appeal for present day exercisers and, which is constructed of few parts unlikely to become disarranged.

Some of the objects of the invention having been stated, other objects—such as this device
25 will give additional muscular and physical development which might be obtained by the use of devices for stretching-out arms movement laterally of the user—will appear as the description proceeds when taken in connection with the
30 accompanying drawings in which:

Fig. 1 is a plan view of the device constructed according to the invention, but a portion of one of the oar elements is broken off to show part of the connection thereof and, the dotted lines indicating the position of the extension of the oar
35 elements assumed when the device is being manipulated.

Fig. 2 is a side elevational view of the device shown in Fig. 1.

Fig. 3 is a longitudinal sectional view substantially along the line 3-3 of Fig. 1.

Fig. 4 is a longitudinal sectional view similar to Fig. 3, but showing the position the movable deck portion, oar elements, shock absorber, and cooperative parts assume when the device is being
45 manipulated; and the dotted lines indicate further position assumed by the movable deck portion or element when the device is being further energized.

Fig. 5 is a horizontal sectional view substantially along the line 5-5 of Fig. 3.

Fig. 6 is a vertical sectional view substantially along the line 6-6 of Fig. 1.

Fig. 7 is a transverse sectional view substantially on the line 7-7 of Fig. 3.

Fig. 8 is a vertical sectional view substantially on the line 8—8 of Fig. 3.

Fig. 9 is a horizontal sectional view substantially on the line 9—9 of Fig. 6.

5 Fig. 10 is a horizontal sectional view substantially on the line 10—10 of Fig. 6.

Fig. 11 is a vertical sectional view along the line 11—11 of Fig. 13.

10 Fig. 12 is a sectional view on the line 12—12 of Fig. 11.

Fig. 13 is a plan view of a foot hold or pedal embodied in the invention.

15 Fig. 14 is a side elevational view of another form of the device, but with portions broken off and other portions shown sectionally to show the interior operative parts which are also constructed according to the invention.

Fig. 15 is a fragmentary plan view of the form shown in Fig. 14 which is also constructed according to the invention.

20 Fig. 16 is an end elevational view of the form shown in Fig. 14 but with portions broken off to show the said parts from another view.

25 Fig. 17 is a side elevational view of still another form of the device, but with portions broken off and other portions shown sectionally to show the interior operative parts which are also constructed according to the invention.

30 Fig. 18 is a fragmentary plan view of the form shown in Fig. 17 which is also constructed according to the invention.

35 Fig. 19 is an end elevational view of the forms shown in Fig. 17, but with portion broken off to show the said interior operative parts from another view.

Fig. 20 is a longitudinal vertical section through another foot hold or pedal embodied in the invention.

40 Referring more specifically to the drawings, Figs. 1—13 give one form of the invention and wherein the numeral 1 indicates a base or hull element simulating that of an actual boat, 2 is a deck portion or element engagable longitudinally with the base or hull element, but is constructed so as to simulate also an actual boat independently of the base or hull element. Oar elements are provided with a vertical portion 3 and horizontal portion 3a having a detachable joint at 4. This joint shows a square upper end portion 5 (see Fig. 1) mountable in suitable socket provided in the end portion 6 of the portion 3a and, a screw or pin 7 disposed on the end portion 6 in engagement with the square portion 5 holds the joint 4 from accidental misplacement.

55 The base or hull element 1 is preferably of metal depressed to form bottom flange portions 8 which function to serve as the bottom portion and an upper flange portion 9, substantially at right angle with the sides from one end of the hull element to a point 10, is provided with a suitable flange portion 11. From the point 10, the flange portions 9 extend upwardly a suitable distance with the sides to form a fore extension 12, hereinafter described.

60 Bars 13, spaced at suitable distance, connecting the flange portions 8 function to brace the said bottom portion. 14 are lugs disposed substantially in vertical alignment with the bars 13 and below the upper flange portion they are for engagement with one end of other bars 15 of which other ends are connected to the bars 13 thereby bracing the upper portion of the hull element to the bottom portion thereof.

75 Other bars 16 connecting the bars 15 at suitable

distance below the upper flange portion 9 function to prevent the upper portion 9 from spreading and also to eliminate vibrations of the side walls. It will be noted that ends of these bars terminate against the inside wall surface of the hull and their ends, secured to additional lugs 17, function to intermediately brace the side walls.

10 It is obvious from the drawings that all said bars constitute a framework forming a longitudinal canal 18 in addition to bracing the side walls of the hull element, and the several joints of the framework may be secured by rivets or screws 19, or other well known manner.

15 20 are open tracks having suitable flange portions 21 and 22, secured to the bars 15 by screws or rivets 23 and, at 24 contact the flange portions 11 and are secured by screws or rivets 25. These tracks each of which runs from one end of the hull element to a suitable distance marked 26 are jointed in alignment with a suitable angle bar 27 which extends to the point 10. The angle bars 27 are also secured to the bars 15 by screws or rivets 28, and screws or rivets 23a secure flange portion 10 to the vertical portion of the angle bars. It is obvious that said tracks and angle bars tend to produce stability on the upper flange portions 9 in addition to bracing, longitudinally, the entire base or hull element 1.

25 29 is a vertically curved and open track extending centrally from the lower portion of the base or hull element to adjacent the apex of the extension 12, and bars 30 support the curved track 29 at suitable spaced distances. These bars 30 having their ends formed into angle portions 31, secured by screws or rivets 32 to the walls of hull element 1, and track 29 may be secured to the bars 30 by screws or bolts 32a, or welded from the outside to said bars 30 in well known manner. This track 29 is provided with flange portions 33 which function to serve as support for an inside lining 34 which extends from the apex of extension 12 downward to any suitable point of the interior of the hull and, it may be secured to the flange portions 9, 11, and 33 by welding (as shown in Fig. 1) or by screws or bolts 35 (as shown in Fig. 7) and, additional support 36 may be provided if desired. Obviously, the lining 34 functions to prevent dust from collecting between the framework and it is constructed in conformity with the design of the device, and the portions 10 function as side guard for the deck element.

55 This deck element 2 preferably of metal depressed to form bottom portions 37 and 37a, side portions 38, end portion 39 and, rim portion 40 which may be provided with an reinforced edge as at 41, or other means may be employed for reinforcing said outer edge.

60 Mounted on the rim portion 40 is a front upper portion 42 and a rear upper portion 43, both of which function to brace the side portions and end portion and also enhance the design, as is evident in Figs. 1 and 2. A seat 44 connecting the side portions being at a suitable distance from portion 42 and at a high elevation in respect to the bottom portion 37, and brackets 45, secured by rivets or bolts 46 to the side portions, support the seat 44.

75 A pair of suitable fittings 47 integral with the side portions 38 are provided with two apertures or recesses, one of which is adapted to engage with the end of bar 48 which braces also said side portions and forming a foot hold for user

in a suitable position and, the other to engage with a pair of stub axles 49, carrying rollers 50 which are adapted for engagement with the tracks 20.

Rollers 51 movable in track 29 are carried by stub axle 52, which is mounted on a pair of opposed hanger elements 53, having flange portions 53a and braces 54, which are also provided with flange portions 54a, and rivets or bolts 55 secure the flange portions 53a and 54a to the bottom portions 37 and 37a.

It will be noted, that the rollers 50 and 51 position the deck element 2, when normal, horizontally with the end portion 39 abutting against the end of the canal 18. Thus when the deck element 2 is being moved the portion 39a of its end portion 39 will come into vehement contact with the adjacent end of said canal 18 before it comes to normal again; and to prevent that, I provide a bumper element 56, having flange portions 57, secured by rivets or bolts 58 or by welding to a suitable location on the end portion 39a of the deck element 2 and, a suitable projection 59 which is adapted to be in engagement with a shock absorber.

This shock absorber is of a cylindrical shell 60 with an open end 60a adapted for engagement with the projection 59, and two or more longitudinal slots 61 which extend from a distance of the open end 60a toward the rear or closed end 60b which is secured to the inner wall of the base or hull element 1. A disc element 62 movable in the shell 60 is provided with lateral projections 63 engaging the respective slots 61 and adapted to position the front of the disc element 62 flush with the front end of the shell 60. A suitable compressed spring 64 being between the disc element 62 and rear end of the shell, functions to prevent impact between the end portion 39 and the end of the canal; as is evident when projection 59 travels through the open end 60a in contact with the disc element, the spring 64 will retard the deck element to normal position, see Figs. 3 and 4. Rubber or the like cushion 65 mounted on the end of projection 59 functions to eliminate sounds which otherwise will exist when projection 59 comes into contact with disc element 62. Brace member 66, secured to brace members 13 and 15, supports as well as stabilizes the shock absorber as is evident from the drawings.

The lower end of the vertical portion 3 of the oar elements are axially mounted on suitable fittings 67 which are mounted on the bottom of the base or hull element. These fittings each has an aperture 68 laterally in which moves freely a portion of a screw or pin 69 which is disposed in said lower end and thereby prevents said lower end from accidental displacement. Another suitable fitting 70 mounted on the exterior upper portion of the base or hull element engages axially the upper portion of the portion 3. It will be noted that the fittings 67 and 70 afford the vertical oar portion 3 and inclined position in respect to the transverse axis of the device as well as being substantially at right angle with the longitudinal axis of the device and in alignment in respect to each other. The portion 3 of the oar elements carries an extension 71. These extensions, disposed above the fittings 67, are of a length substantially half the width of the bottom of the base or hull, and 72 are suitable rods each having one end pivotally connected at 73 to the free end of the extensions 71 and, the other end pivoted to suitable end por-

tions of a stub axle 73 which is axially mounted on a hanger element 74 disposed to suitable lower portion of the deck element 2. Thus, upon movement axially of the portions 3 said extensions 71 force the rods 72 in position to facilitate movement of the deck element, as indicated by dotted lines in Fig. 5. Said portions 3 and their extension 71 may be constructed of one piece thereby forming L shaped oars. A handle portion 75 integral with the horizontal portion 3a of the oar elements carries a hand grip portion 76 which is axially mounted on a suitable bar 77, connecting the end portions 75a and 75b. Thus, when the grip of user is on portion 76 the movable deck is being moved from its normal position by drawing the free ends of the oar elements toward each other, as shown by dotted lines marked A in Fig. 1; thereby positioning the deck element, depending on the physical development of user, substantially as shown in Fig. 4; and when additional effort is exercised on the oar elements the deck element is being further advanced as indicated by dotted lines in the same figure. It should be further noted, that user is subjected to resistance also, when the deck element takes to normal position; and if user should accidentally release the grip on the portion 76 the deck element will increase in velocity, but the end of the bumper 56 will come in contact with disc element 62 which will transmit the shock on the spring 64 so that impact between the deck element and base or hull element is eliminated. Further precaution for this is provided by another resilient spring element 78 adapted to be in engagement with the extension 71.

These spring elements 78 are shown constructed as of two blades 79 and 79a and secured at 79b against the wall of the base or hull element in suitable position. However, for consideration, the blade 78 is for this form of the device. The blade 79a and also a projection 79 carries by portion 3 coacting with blade 79a to be referred to hereinafter. In Fig. 5, it will be noted that the blade 78 is substantially flattened by the extension 71 when the deck element is normal and, the dotted lines indicate the blade 78 when normal or when the deck element leaves its normal position. Obviously therefore when the deck element retards by gravity the extension 71 engages the blade 78, which in conjunction with the said shock absorber slow up the movement of the deck element and thereby lessens the resistance, subjected to user, before normal position of the deck element.

In operation, the operator seats him or herself on the seat 44, placing his or her feet against bar 48 so that, the lower portion of the body is supported between the foot forming support 48 and end portion of portion 42 forming a backrest. In this position, the operator bends forward and spreads out the arms to hold on portions 76 and, the free ends of the oar element being pulled by the strength of the arms toward occupant will force the deck element 2 along the tracks backward in respect of user or in the same direction as the oar elements and, the fore end of the deck element diverging upwardly or above the hull element. Evidently, the movements of the deck element together with the positions and movements of the body of occupant simulate those experienced with an actual rowboat. And when the deck element is retarded by gravity, due to the curved track 29, the operator controls it also by the strength of

the arms which, being spread out, produce diversity in muscular development heretofore not encountered with devices of this type.

Heretofore, when foot holds are provided with devices, they are on stationary location, which makes it not adapted to every or various occupants, and additional expense is required for persons maimed about the lower portions of the body. Therefore, I use a detachable foot hold whereby distance between foot holds and seat or back rest, for successfully and conveniently operating the device, is unlimited. And in Figs. 11, 12 and 13 are shown an enlarged detail of one form of such foot holds mounted upon the bottom of the deck element, and it comprises a conventional vertical element 80, of which the upper ends diverge substantially at 80a to form flange portions for preventing misplacement of the foot, and it will be noted that the portion 80b between the portions 80a is flat or tends to be in conformity with the undersurface of the fore portion of the foot, thus forming true hold therewith. The lower portion 81 is formed so as to pass through apertures or recesses 82 disposed in the bottom portion 37 and in engagement with the undersurface thereof and with shoulder portions 83 functioning to support the vertical element 80 on the upper surface of the bottom portion 37. A horizontal portion 84, forming a heel portion with the vertical portion 80, carries a wedge-shaped projection 85, for engaging an aperture 86, provided in the vertical portion, and a pin 87 detachably mounted in the projection 85 being rearwardly of the vertical projection 80 prevents misplacement of the heel portion 84, which further carries flange portions 88 and concave portion 89, whereby accidental movement of the heel of user is prevented.

To replace said foot hold from one aperture 82 to another, as may be desired by user, the pin 87 is first pulled out, then the heel portion 84 being pulled out of the aperture 86 leaves the toe or vertical portion free to be pulled out, and inserted then in the desired aperture or recess 82. Then the projection 85 is formed into aperture 86, thereby securing the vertical portion 80 in position and pin 87 is then disposed in its mounting.

It will be noted, that the hand portion of the oar elements are shown for sake of simplicity being in horizontal alignment, thus they remain apart as shown by dotted lines, marked A. However, the oar element portions 3a can be constructed so that their hand portions are out of horizontal alignment, and thereby afford crossing each other, when pulled by the strength of the arms of user, as indicated by dotted lines, marked B in Fig. 1. Obviously, therefore, the deck element is being moved forward upwardly a shorter distance by the first said arrangement of the portions 3a of the oars, than by the said second arrangement, which affords additional muscular development from an additional angle, for the arms of user are crossing each other while energizing the oars for further forward upwardly movement of said deck element.

On a curved or inclined track, the deck element is retarded by gravity easily to normal, while on a horizontal track, means other than the oars are essential to retard to normal the deck element.

And as this invention is intended for use on different shape of base or hull elements with suitable track elements; it is therefor, that I provide projection 79 which is mounted upon

each oar and is of suitable length to be in engagement with the blade 78a for straight or horizontal tracks which subject user with little resistance and it is adapted to retard the deck element to normal and at the same time subjecting user when energizing the deck element forwardly to resistance substantially as when user is on a curved or inclined track as heretofore stated.

It will be noted from the dotted lines in Fig. 5, that projection 79 tends axially to contact blade 78a of the resilient spring. Thus when the forward movement of the oar elements is completed the blade 78a will be flattened by the projection 79 substantially as the opposed blade 78 shown in solid lines when the oar elements are in normal position. Obviously, on a horizontal track, the blade 78a of the spring tends to repel the projection 79, thereby urging the oar elements to normal and of course, the deck element also; and on a curved or inclined track, the blade 78a of the spring when desired to be in engagement with projection 79 will produce increased resistance in a forward movement of said oars which will meet with the appeal of users of above normal muscular development.

88 is an ornamental element preferably shaped, exteriorly, to simulate an actual stanchion to which may be secured one end of a rope X and the other end of said rope detachably secured at Xa to the fore end of the deck element so that when the device is being used, the end connecting the deck element is moved therefrom and placed on the fore end of the hull element, as indicated by dotted lines in Fig. 2. Obviously, an anchor XX may be attached to either ends of the rope or said anchor may be disposed upon said fore end, as shown in solid line, to which said end of said rope may be supported, if so desired. The lower portion 89 of the stanchion 88 is secured in an aperture 90 formed in the apex of extension 12, and the upper portion 91, which may be of glass or like transparent or colored element, detachably mounted above the lower portion 89.

Having described and illustrated the parts and the assembling thereof and operation of the device, other forms constructed also according to the invention will be readily understood.

And Figs. 14 and 16 show another preferred form. In this form, it will be noted that the sides and rear walls of the body of this base element 92 is, transversely, curved shaped and it carries a pair of closed tracks 93 which are disposed substantially horizontal and, a pair of other or open tracks 94, which being straight, are disposed in a desired inclined position or angularly in respect to the tracks 93. And tracks 93 and 94 are substantially in vertical alignment, and movements of the deck element 95 on these tracks are substantially similar as heretofore described.

The upper side of the sides 96 of the deck element 95 are substantially flush with the upper side of the base element 92 but they project upwardly at 97 to carry rollers 98 for engaging the tracks 94. An axle 99, connecting the right and left rollers 98, is housed in hub element 100 integral with the deck element.

The seat 101 integral with the upper portion 102 braces the sides of the deck element as well as produce a portion 103 to serve as back rest. The foot end 104 of the deck element carries hub elements 105 integral with said end 104, and an axle 106 connecting a right and left roller 107 in engagement with the tracks 93.

It will be noted that the bottom portion 108 is at a higher elevation in respect to the base 75

element, and portion 108a forming part of the bottom portion 108, as heretofore described, carries one or more recesses or apertures 109 integral therewith. And a cross bar 110 carries end portions 110a adapted to detachably engage the recesses or apertures 109. A pair of foot holds 111 axially mounted on the bar 110 (see Fig. 20) each of which has a hub element 112 for engaging the bar 110 and, a screw 113 integral with the hub element projects freely into, grooves 114, which are provided at spaced distances on bar 110. Thus, to space said foot holds to any desired distance apart, their screws 113 are unscrewed so that the hub elements 112 can be shifted to the grooves 114 for said position; then the screws 113 are again manipulated to project in the respective grooves so as to facilitate rotary movement of the foot holds. It will be noted further, that the foot holds are, vertically, substantially similar as the previous ones and, the heel portions 111a are also provided with spaced flange portions 111b to support the heel of user as well as to prevent accidental movement thereof; and the mounting upon the bar 110 affords various positions of the foot holds coacting with the legs of user, when the device is being manipulated as heretofore described. The bar 110 can easily be pulled out from one pair of opposed recesses or aperture 109 and the ends 110a again are pushed into other opposed pairs and thereby produce desired distance between the seat 101 and foot holds 111.

The mounting as well as the functioning of the oar elements 115 are similar to the one previously described, but the horizontal portions 115a being of an attractive design having hand grip portions 116, which normally are positioned below the level of the seat, cause thereby the body of user to bend more forward and downwardly when energizing the device.

In the drawings it will be noted that the hand grip portions 116 afford horizontal position of the palm of user, and the dotted lines in Fig. 16 indicate the left hand grip portion, when constructed upwardly, whereby both free end portions of the oar elements can be pulled over the other longitudinal half of the device and not contacting each other when the oar elements is being moved about their axial connections as heretofore described.

The extensions or arms 117 are of extra length adapted to cross each other about the centre line of the base element and therefore are constructed out of horizontal alignment in respect to each other.

Connecting rods 118 having one pivoted end at 119 with the free end of the extensions or arms 117 and the other ends are in vertical alignment, pivotally connected to a bolt 120 of a suitable fitting 121, which is secured by rivets or bolts 122 to the deck element.

The resilient spring elements 123, being disposed so as to come into contact with the extensions or arms 117, function similar to those already described.

It is obvious from the drawings that with this form of the device user is subjected to continuous resistance in the same manner as with said first form described; however effort to bring about muscular development is greatly reduced, and the travel path of the deck element is longer in respect to the longitudinal axis of the device.

In Figs. 17, 18 and 19 is shown still another preferred form constructed according to the invention. And it is obvious from the drawings

that this form will meet with the appeal of users possessing exceptional muscular development; as the movable deck element is energized by the strength of the arms of user to bring about increased altitude of its front when on the travel path, which is shorter than those of the previous forms in respect to their longitudinal axis.

The deck element 124 is of a single member or platform so constructed to support the occupant and, preferably positioned, when normal, flush with the upper side 125 of the base element 126, which is provided with a pair of opposed tracks 127 constructed of one piece for engagement with suitable front rollers 128 and rear rollers 129, both of which, preferably, are in vertical alignment.

The rear rollers 129 are axially mounted on stub axles 130, mounted on suitable hub element 131 having flange portions 132, which are mountable on the deck element and secured in place by rivets or bolts 133.

The front rollers 128 are also axially mounted on stub axles 134 mounted on suitable hangers 135 having brace portion 135a and secured in place by rivets or bolts 136.

A suitable back rest element 137 being adjacent the front end of the deck element is mounted on the floor thereof; and foot holds 138 are adjustably secured in apertures in similar manner as previously described. It is obvious from the drawings that the foot holds 138 are similar to those shown in Fig. 11, but the upper portion 138a is curved forward to form contact proper with the foot of occupant.

The oar elements 139 are, in construction and function, similar to those of the other forms already described. However, in this form the vertical member of the oar elements 139 are axially mounted in a rearward inclined position and in parallel relation to each other; and the horizontal members 139a are of straight elements having hand grip portion 140 which affords vertical position of the palm of user. In Fig. 19, it will be noted that the members 139a can be constructed to facilitate a high position for the hand grip in respect to the deck element as shown in solid line, or a low position as indicated by dotted lines.

The extension 141 integral with the vertical member of the oar elements functions in similar manner as heretofore described; and connecting rods 142 having ends adapted to engage with suitable connection 143 of the extension 141, and other suitable connection 144 which are provided by a suitable fitting 145, secured by rivets or bolts 146 to the deck element. This fitting 145 projects downwardly sufficiently to allow clearance between the under portion of the deck element and connecting rods when the device is being operated.

It will be noted that the portion of the tracks in engagement with the rear rollers 129 is substantially downward inclined so that downward movement of the rear rollers forces the front rollers 128 on their upward movement thereby reducing the constant resistance which user is subjected to, when the device is being drawn upwardly or when retarding down the tracks.

It is of course understood that the bottom of the deck element shown in the first two forms may, instead of being of two portions or pieces, be constructed of one piece of curved cross-section. And the deck element shown in the last form can deviate in respect to its straight or

flat upper surface to meet flush, or parallel above, the upper side of the base element as stated heretofore. Also, that I can provide one shock absorber in alignment with and below each longitudinal side of the deck element of the several forms thus described for evenly balancing the deck element when retarding to normal. Also, that I can position the rear tracks of the first and second forms forward downward inclined and thereby produce similar results as with the last said form of the device.

It will thus be seen that there is herein described an article in which the several features of this invention are embodied, and which article in its action attains the various objects of the invention and is well suited to meet the requirements of practical use.

It is obvious that the invention may be embodied in many forms and constructions within the scope of the claims and I wish it to be understood that the three forms set forth in the drawings and specification are but the preferred of many forms. Various modifications and changes being possible, I do not otherwise limit myself in any way with respect thereto.

And I claim as new:

1. The combination in an exercising machine of a base member comprising spaced side walls with connecting end portions, said base member having a substantially boat-shaped body and, cross bars connecting the lower portion of the spaced side walls, other bars connecting the said cross bars and upper portion of the spaced side walls and more bars connecting the said second bars so that said first, second and latter bars constitute interior frame work forming, longitudinally, an unobstructed open portion, a deck member engageable in the open portion, said deck member normally being adjacent one end of said open portion carrying rollers, and tracks carried by said base member engaged by said rollers, a seat mounted adjacent one end of said deck member and foothold elements adjustably mounted adjacent the opposed end, a pair of oar elements axially mounted on said frame work carrying projections below the deck member and other projections above the deck member, said upper projections extending from either side of said base member to the opposed sides respectively and other projections on the free end of the upper projections to serve as handle portions, a pair of bars having one end axially connected to the lower portion of the deck member, the other ends pivoted to said lower projection of the said pair of oar elements whereby when the said handle portions are being drawn toward one another the deck member moves also in the direction of the upper projection of the oar elements.

2. The combination in an exercising machine as in claim 1, guide means carried by said base member to prevent accidental misplacement of said deck member when being in the travel path, and shock absorbing means between one end of the deck member and adjoining end portion of said base member to prevent impact between the said portions when said deck member moves to normal, and cooperative spring means between the oar elements and base member to retard the deck member in its return path to normal position.

3. The combination in an exercising machine of a base member comprising spaced parallel walls with connecting portions including, interior brace members, a deck element movable be-

tween the spaced walls, mounting for said deck element including rollers, and tracks interiorly of said spaced walls engageable by said rollers so that forward movement of said deck element is diverged upwardly between said walls, a seat including a back rest portion on the deck element, said back rest portion being forwardly in the line of travel of said deck element, a pair of foot holds adjustably mounted on said deck element capable for various positions longitudinally in respect to the seat and transversely also in respect to each other, and oar elements disposed on either wall of the base member, said oar elements having an extension below the deck element, and another extension crossing from above the deck element substantially beyond the width of the base member, operative means between the free end of said lower extension and lower portion of said deck element, whereby upon movement of the said upper extension said deck element is moved between said spaced parallel walls.

4. The combination in an exercising machine, of a base member comprising spaced parallel sides with connecting end portions and brace members crossing one another interiorly of said parallel sides, said base member having a substantially boat-shaped body and inside open area, a carrying element projecting and movable in said open area adapted for engagement with the sides, mounting means for said carrying element including rollers, tracks mounted in said open area for engaging said rollers so that said carrying element may be moved longitudinally in said open area, a seat having a back portion mounted on said carrying element, said back portion being forwardly in the line of travel of said carrying element, foot holds adjustably mounted on said carrying element adapted for various positions longitudinally in respect to the seat and also transversely in respect to one another, means for reciprocating movement of said carrying element including L shaped oars axially mounted on either side of said base member and lever elements adjustably mounted upon the upper end of said oars normally projecting cross-ways above the carrying element.

5. The combination in an exercising machine of a base member having spaced side frame work, and cross braces supporting the side frame work and also providing a longitudinal recess, a platform normally horizontally adjacent one end of the frame work movably mounted on the upper portion of said recess, mounting means for said platform including, rollers at either ends of said platform, and tracks carried by the base member engageable by said rollers whereby the platform in the line of travel diverges upwardly in respect to the longitudinal axis of the base member, and oar means vertically mounted on either spaced side of the base member carrying extensions below the platform and other extensions above the platform, and pivot means between the first extensions and lower portion of the platform whereby upon movement of the second extension the platform is moved from one end of the spaced side frame work to the other or opposed end thereof.

6. The combination in an exercising machine, of a hull shaped frame work including, an enclosure mounted upon same, connecting brace members connecting said hull shaped frame work to form a longitudinal unobstructed upper inner portion, a platform movably mounted upon said hull shaped frame work adapted to engage divergingly in said inner portion, mounting means

for said platform including rollers placed forwardly and rearwardly thereof, and tracks carried by said supporting frame work for engagement with said rollers whereby one end of the platform in its forward travel is substantially raised above the other or opposed end thereof.

7. The combination as in claim 6, oar means axially mounted on said supporting frame work carrying extensions below and above the movable platform, and operative means between the lower extension and the platform whereby upon movement of said upper extension the platform is moved longitudinally along said upper inner portion, and cooperative spring means between the said lower extension and supporting frame work for easeful movement of said platform and other spring means between the platform and supporting frame for preventing concussions between the frame work and platform when retarding to normal.

8. In an exercising machine as described, the combination of a base member, a reciprocating platform supported by said base member, operative means between said base member and platform whereby one end of said platform is raised above the other or opposed end when said platform is being moved longitudinally of said base member, a pair of upright oars, mounting means for said oars carried by said base member, and extensions at either end of said oars, one adaptable for engagement with the lower portion of said platform and the other for actuating said platform along said base member.

9. In an exercising machine as set forth in claim 8, a plurality of apertures at one end of said platform, and a seat including back rest adjacent the opposite end, a pair of foot pieces, projections on the lower portion of said foot pieces fitting in said apertures and locking means between said projections and said apertures adjustably connecting said foot pieces to said platform in alignment with said seat.

10. In an exercising machine of the character described, the combination of a base element, a reciprocating upper platform member, and oar members for actuating said upper platform member mounted on said base element, a plurality of shock absorbing means placed interiorly of said base element, and means coaxingly engaging said shock absorbing means carried by said oar members arranged so that, when said platform member retreats, its normal position is reached.

11. The combination in an exercising machine of a boat shaped body, a base member, brace means in said base member forming an open hull portion, a reciprocating deck member normally at one end of said hull portion, means for supporting said deck member including rollers, and tracks disposed about said hull portion engageable by said rollers whereby the deck member in the line of travel rises upward in said hull portion, oar elements for actuating said deck member, said oar elements having a vertical portion axially mounted on said base member and an extension adjacent either end of said vertical portion, one movable in said hull portion, the other movable above said base member, said latter extensions each extending from side to side of the base member, and rods pivoted to said first extension and deck element lower portion whereby upon movement of said latter extensions movement of said deck member is brought about.

12. In an exercising boat the combination of a hull portion, a reciprocating deck portion

mountably on said hull portion, brace means interiorly of said hull portion, a plurality of tracks mounted on said brace means, said tracks being spaced longitudinally of said hull portion and adapted to receive rollers, mounting means for said deck portion united with said rollers, oar elements axially mounted on either side of said hull portion, said oar elements each extending from the lower portion of said boat to a distance above the hull portion and having a projection at the lower portion thereof, and rods below the deck portion connecting the deck portion to said projections so that upon axial movement of said oars the deck portion is moved on said tracks, leverage means for said oar elements, said leverage means comprising suitable bars extending from either side of said hull portion to the upper end of said oars, and means to detachably attach one end of said bars to the upper end of said oars and other means to prevent displacement of said joint, and hand grip portion at each free end of the leverage means cooperative with the position of the grip of user when the oars are being rotated.

13. The combination in an exercising boat of a hull portion, a plurality of braces interiorly of said hull portion, a plurality of tracks in said hull portion, said tracks being supported by said braces and adapted to receive rollers, a deck portion movable between the upper portions of said braces, said deck portion normally adjacent one end of said hull portion being substantially in horizontal position capable of being placed in various inclined positions during movement longitudinally of said tracks, and cooperative means between one end of the deck portion and adjacent end portion of said hull portion whereby movement of said deck portion is slowed up when returning to normal location.

14. The combination in an exercising boat of a base portion and an associating upper element movable longitudinally on said base portion, a pair of oars normally crossing each other transversely of the device, said oars having an angular extension engaging the upper portion of said base portion and also the lower portion of said base portion, an arm on the lower portion of the angular extensions normally parallel with the longitudinal axis of the device, axle means mounted below the upper element, and rods connecting the free end of the arms and axle means adapted for reciprocating the upper element on its base portion, and means against which the arms are urged to cause the upper element to retard with decreasing force.

15. The combination in a boat element for exercises, of a carriage for its user, and a base element for supporting said carriage, said base element having an upper side of which a portion is substantially horizontal and another portion diverging therefrom upwards to the front of said base element, means connecting said carriage to said base element to effect reciprocating movement of said carriage along the upper side of said base element, oar elements disposed at either side of said base element for movement of said carriage, said oars having a pair of arms, one extending above and crossing the carriage, the other being below the carriage, and means connecting said latter arm to said carriage whereby movement thereof produced by said first arm will effect movement of said carriage.

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