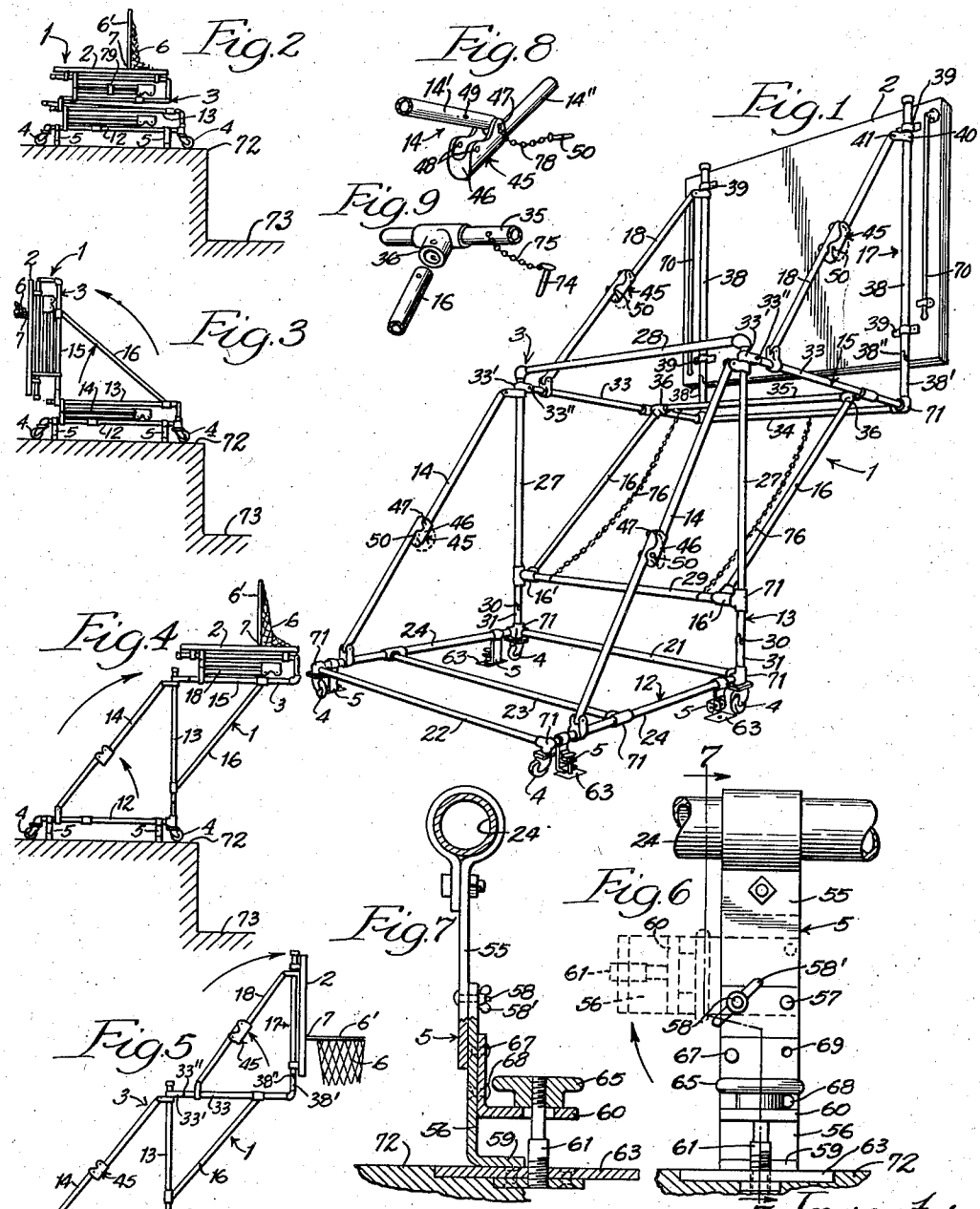
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BASKETBALL BACKSTOP

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Inventor:
Elmer J. Gross,

Witnesses:
N. J. Arkell
Fred M. Davis

By Rummler, Rummler & Woodworth,
Attorneys.

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BASKETBALL BACKSTOP

Elmer J. Gross, Chicago, Ill., assignor to J. E. Porter Corporation, Ottawa, Ill., a corporation of Illinois

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This invention relates to portable basketball backstops of the folding variety. The main objects of the invention are to provide such a device of light and simple construction, inexpensive to make, easy to manipulate and safe to use; and more especially to provide such a fold-up backstop, with structural supporting features therefor, adapted to facilitate and assure ready set-up and subsequent removal of the backstop, according to current needs, so as also to accommodate various other uses of the gymnasium or such recreation place.

A special object is to provide for such compactness when collapsed and folded as to accommodate easy concealment in a minimum of space, as for instance in a closet or under a platform or the like.

This invention is illustrated by the accompanying drawing in which:

Fig. 1 is a perspective rear view of the fold-up backstop assembly in its unfolded ready-for-use position.

Fig. 2 is a side view of the device, on a small scale, in its folded position on the front part of the stage or platform, ready for unfolding and raising.

Fig. 3 shows the position after the first step in unfolding the framework.

Fig. 4 shows the position after the second unfolding movement.

Fig. 5 shows the final position after the third unfolding movement, the backstop proper and basket being held forward from the platform and over the gymnasium floor, the rearward part of the frame being detachably secured to the platform floor as will be explained.

Fig. 6 is an enlarged fragmentary view showing one of the floor anchorage engaging means.

Fig. 7 is a similarly enlarged view in section on the line 7—7 of Fig. 6.

Fig. 8 is a fragmentary view on a medium scale showing one of the jack knife joints on one of the folding tension struts of the frame.

Fig. 9, on a like scale with Fig. 8, shows a rod and socket joint, such as provided for the forward frame brace struts.

When ready for use the backboard appears as in Figures 1 and 5. Here the unit 1 as a whole comprises a planar panel or backboard proper indicated by numeral 2 and a foldable supporting frame 3, shown fully extended and erect, the latter having wheels or casters 4, and floor engaging fasteners 5. The basket 6 has a rigid annular rim and supporting arm unit 6' affixed to the face of the backboard 2 in the usual way, as shown at 7.

The said frame 3 comprises, first, a horizontal bottom part 12 to which the casters 4 and fasteners 5 are attached, second, a part 13 hinged to the forward edge of the part 12 for upward and forward swinging, jackknife braces 14 (see Fig. 8) connecting the remote edges of said parts 12 and 13 when the device is in use and also supporting the free edge of the part 13, third, a part 15 pivoted to the upper edge of the part 13 swingable upwardly to a horizontal forward position, with brace means 16 swingably connected at 16' to uphold the front edge thereof, and fourth, a main part 17 on which the board 2 is rigidly mounted, said part 17 being pivoted to the front edge of said part 15 for upward swinging thereon, and rearward jackknife braces 18 (see Fig. 8) to secure said part 17 and its board 2 in erect position on said part 15. Said braces 18 are substantially like the corresponding braces 14 for part 13.

The said part or base 12 comprises a front bar 21, a rear bar 22, an intermediate bar 23, and side bars 24, all rigidly connected as apparent from Fig. 1.

The second part 13 constituting the first lift member or riser comprises side bars 27, a top cross-bar 28 and a lower crossbar 29 serving also as a hinge pivot for the braces 16. The base pivots 30 for bars 27 are carried on short posts 31 set at the forward corner of the base part 12.

The third part 15 comprises two side bars 33, a forward end bar 34, and a medial crossbar 35 somewhat back of bar 34. On said bar 35 are fixed a pair of socket units 36 to receive the free upper ends of braces 16. The bars 33 are pivoted at their rear ends to short posts 33' set on bars 27, as shown at 33''.

The board carrying part 17 comprises merely a pair of side bars 38 secured by fasteners 39 to the back of board 2 and a pair of pivot fixtures 40 set near the outer ends of bars 38 to carry the pivots 41 for members 18.

The central joints 45 for the bars 14 and 18, each comprises a channel-shaped lock member 46 rigid with the upper section, as 14'', and provided with a pivot 47 at its upper end to hold the lower section, as 14', the lower end being apertured at 48 in registry with a corresponding aperture 49 somewhat back from the upper end of the lower bar section as on bar part 14' to receive a locking pin 50, as appears on Fig. 8.

The four floor anchors 5 (see Fig. 7) each comprises a bracket 55 clamped to a side bar 24, in

combination with a foot **56** pivoted thereto at **57** and provided with a hand releasable clamp bolt **58** having a wingnut **58'**. The said foot has a tread part **59** and a lateral arm **60** centrally apertured and carrying a down hold bolt **61** adapted to releasably engage an anchorage plate **63** set permanently in the floor. The bolt **61** has a thumb nut **65** for setting the lock. The arm **60** is riveted to foot **56** at **67** and **68**. Fig. 6 shows an extra hole **69** in foot **63** to receive bolt **58** when the foot is raised to the position indicated in dotted outline.

It may be noted that the short spacing-posts **31**, **33'** and **38'**, set at right angles to their supporting parts **12**, **13** and **15** respectively, serve when the framework **3** is folded horizontally to maintain sufficient separation of the adjacent parts to accommodate the accessory members, including the braces **14**, **16**, and **18** and the lift-rod **70**. The brace members **14** and **18** are all provided at their ends with pivots set in bar clamps as illustrated at **41** and **40**. The frame work is mainly of iron pipe with corner pipe fittings such as at **71**.

Operation

When the backstop is to be used it is first trundled from its storage place to the front of the stage **72**, or wherever desired, as for instance on the floor **73**. Then, second, the foot anchorages are swung down and secured to the floor plates **63**, as shown in Figs. 2 and 7.

Then, third, the attendant grips the edge part **34** near the base of board **2** and, fourth, swings the parts **15** and **17** with board **12** backward on pivots **33''** to the position shown in Fig. 2, and fifth, the braces **16** are then set in place at **36** and, sixth, secured by pins **74** carried on chains **75**, see Fig. 9. In order to prevent excessive swing in thus unfolding, a pair of chains **76** extend from bar **29** to bar **35** or between equivalently effective points on bars **27** and **33**, as will be understood.

Next, seventh, the operator grasps the top part of the backboard **2** or its adjacent support members, and eighth, swings the folded parts **2**, **15** and **17** and part **13** upward and forward to the position of Fig. 4. Then, ninth, the pins **50** carried on chains **78** are inserted in the joint member **45** at **48**. The tenth step is to unfasten the strap **79** which holds the link parts **14'** and **14''** snugly together when the device is put away. The operator then, eleventh, grasps the free end of the pendant lift rod **70** and, twelfth, pushes upward and thereby thirteenth swings the board **2** and the supporting part **17** upward on the hinges **38''** to the playing position, as in Fig. 5, the goal basket **6** being held securely above the floor **73**.

Fourteenth, he then inserts the joint pins **50** in the knuckle joints of links **45**. Finally, fifteenth, he fastens the free end of rod **70** to the frame **17** just back of board **2**.

To fold the device one merely reverses the steps above enumerated.

Hence it is apparent that the device can be folded and rolled away in five minutes. During games it fastens to flush floor plates and is so designed and braced that it is just as rigid as a stationary backstop.

By merely withdrawing four lock pins and unscrewing four hand screws, this backstop can be folded down and moved out of sight. When thus folded for storage, the maximum height of the backstop, not counting the goal, is only 38 inches. It is equipped with 5 inch diameter extra strong rubber tired casters. One man, as soon as he understands the operation, can set up and take down the backstop.

The four planar frame members **12**, **13**, **15**, and **17** all pivotally connected or hinged together edge to edge in series, make for horizontal compactness when folded and for great strength and frame rigidity when extended and braced by members **14**, **16**, and **18**, ready for basketball use.

It is to be understood that some of the details set forth may be altered or omitted without departing from the spirit of the invention as defined by the following claims.

I claim:

1. A basketball backstop comprising a basket supporting board in combination with a downwardly and rearwardly collapsible frame having means for anchorage to the floor, said frame consisting substantially of a plurality of serially hinged horizontally foldable planar members and releasable braces to secure them in effective board supporting position for use of the backstop.

2. A basketball backstop device comprising a basket carrying board and a folding frame to uphold the board in vertical playing position when said frame is extended and to hold said board in horizontally lowered position when said frame is folded for removal of the device to a storage place, said frame including two sets of horizontal members one set to be held elevated above the other and forwardly thereof when the device is unfolded for use and pivotal linkage means swingable upwardly to carry and support the upper said members on the lower members and to hold the said board erect at the front of said device.

3. A unitary device of the class described comprising a basketball board and a foldable frame to enable ready erection and lowering of said board, said frame comprising a horizontal bottom part having means for anchorage to the floor, a second part hinged to the forward edge of the first said part for upward and forward swinging, jackknife braces connecting the remote edges of said parts when the device is in use and also supporting the free edge of the said second part, a third part pivoted to the upper edge of the second part and swingable upwardly to a horizontal forward position, with brace means swingably connected to uphold the front edge thereof, and a fourth part on which said board is rigidly mounted, said fourth part being pivoted to the front edge of said third part for upward swinging thereon, and rearward jackknife braces to secure said fourth part and said board in erect position on said third part.

4. A foldable backstop device adapted for portability comprising a goal basket supporting board in combination with a downwardly and rearwardly collapsible frame having a base equipped both with wheels and with means for anchorage to the floor, said frame including intermediate fold members swingable to ninety degrees relative to each other and to the adjacent board and base, and articulated brace means for the front and rear, which brace means are disposed in compression and in tension respectively.

5. A foldable backstop device adapted for portability comprising a goal supporting board in combination with a downwardly and rearwardly collapsible frame comprising a floor engaging base and intermediate fold members swingable to ninety degrees relative to each other and to the adjacent board and base, and articulated

brace means for the front and rear, which brace means are disposed in compression and tension respectively, the tension braces having jackknife fold joints and pivotal end connections and means to lock the joints in effective position, and the compression braces having pivotal connections at one end and pocket thrust connections at the other ends with locking means therefor when set for use.

6. A portable collapsible basketball backstop apparatus comprising a basket and a supporting backboard therefor held in a vertical plane when in operative position, and a frame comprising a series of horizontal and vertical members foldably connected together in series edge to edge for holding said backboard in operative position when extended, and arranged to be folded one upon another whereby said vertical and horizontal members all lie horizontally when said apparatus is folded for storage.

ELMER J. GROSS.