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2,596,543

FOLDABLE BASKETBALL GOAL CONSTRUCTION

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2 SHEETS—SHEET 1

Fig. 1.

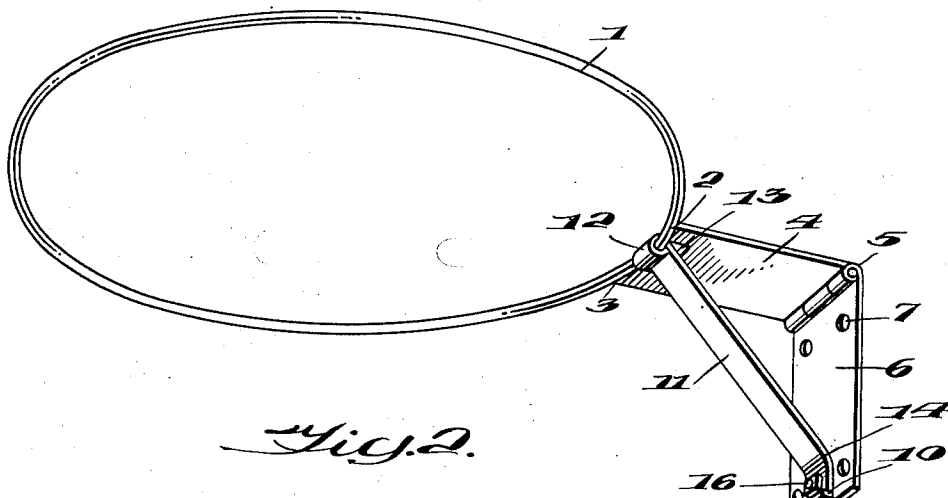


Fig. 2.

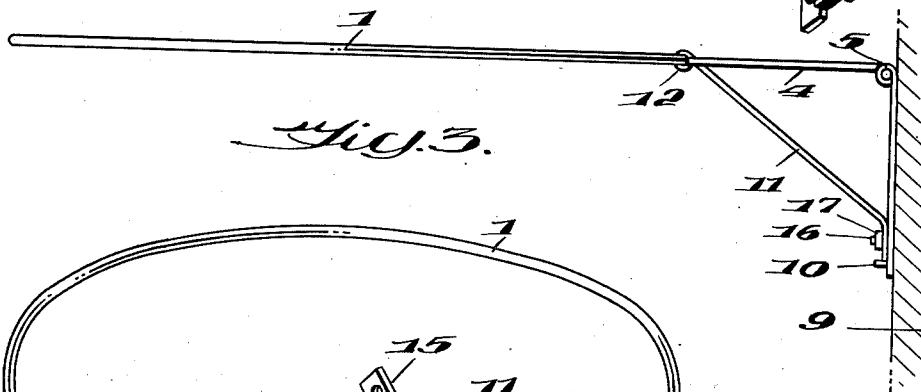


Fig. 3.

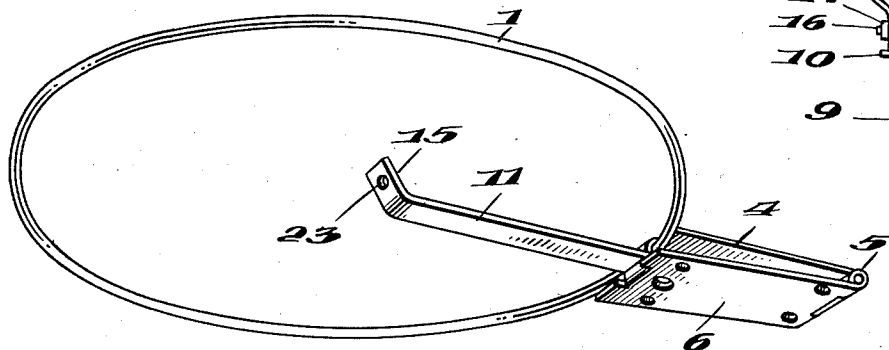
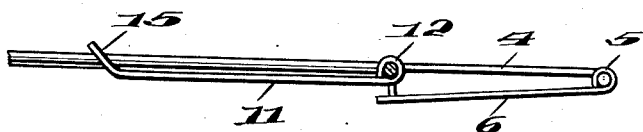


Fig. 4.



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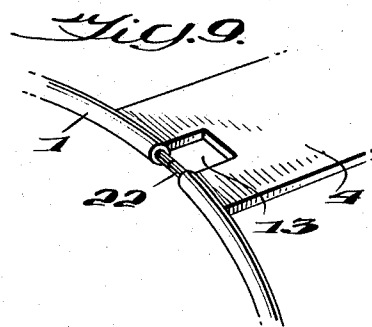
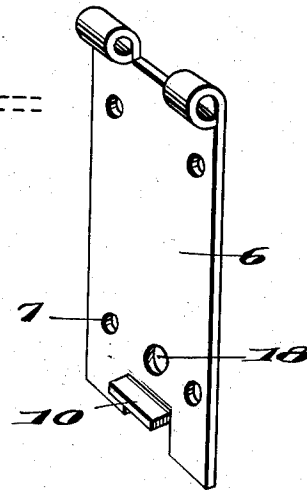
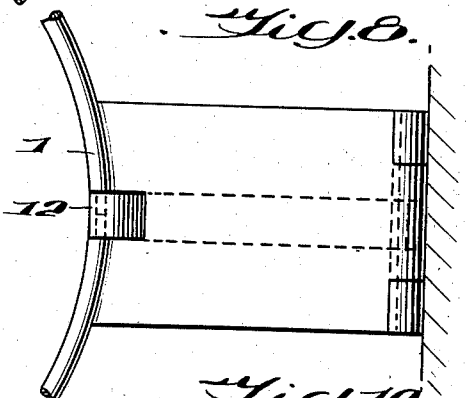
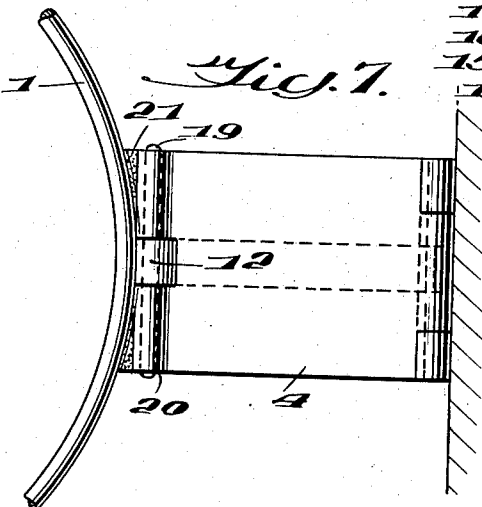
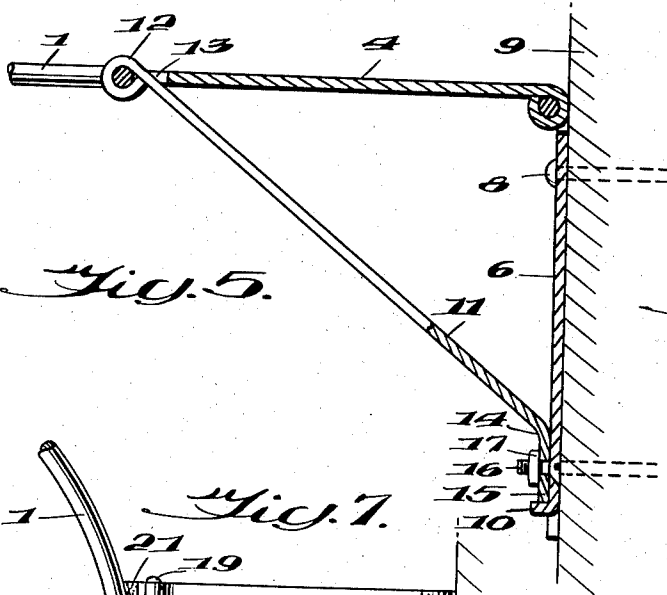
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FOLDABLE BASKETBALL GOAL CONSTRUCTION

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2 SHEETS—SHEET 2



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FOLDABLE BASKETBALL GOAL
CONSTRUCTION

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5 Claims. (Cl. 273-1.5)

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This invention relates to basketball goals, and has for its object the provision of a basketball goal construction which is collapsible so that it may be packaged in a relatively thin box, thus saving storage and shipping space as well as effecting economies in cost of packaging, the collapsibility not affecting its sturdiness, nor its ability to be readily, instantly, and precisely installed at the necessary horizontal level for play.

Other objects of my invention include a basketball goal construction which is strong and sturdy, the goal ring of which is supported in definite and certain horizontal position in relation to the floor of the field of play and perpendicularly with respect to the backboard in right-angled relationship without the necessity for adjustment; the provision of a basketball goal construction which includes in combination with a goal ring, a hinge having legs that collapse in flat or substantially flat form when in packaged condition, and a supporting brace pivotally mounted and capable of being positioned in the plane and space of the goal ring and in the plane of the collapsed hinge when in packaged condition; a basketball goal construction having a collapsible hinge support and associated brace or strut, the hinge having an abutment or stop thereon for positioning and/or support of the brace in certain and definite position to maintain the legs of the hinge positioned to provide a right angle between said hinge legs at all times without adjustment; all of which are hereinafter described and claimed.

Further objects and advantages of the invention will be apparent as the description proceeds.

In the drawings showing my invention:

Figure 1 is a perspective view of a goal construction in its assembled condition during a basketball contest or play;

Figure 2 is a view in side elevation of the construction of Figure 1 in assembled condition supported on the backboard;

Figure 3 is a perspective view of the goal construction of Figure 1 in collapsed condition ready for packaging, or just removed from a package;

Figure 4 is a view in vertical cross-section of the construction of Figure 3.

Figure 5 is a fragmentary detail cross-sectional view of the structure shown in Figure 2.

Figure 6 is a detail perspective view of the backboard attaching leg of the hinge element shown in the other figures;

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Figure 7 is a fragmentary plan view of a goal construction showing a modification with the pivotal mounting of the brace, strut or bracket support on a hinge element.

Figure 8 is a fragmentary plan view of a goal construction showing a modification with the pivotal mounting of the support on the goal ring.

Figure 9 is a detail perspective view of the mounting means of the construction shown in Figure 8, with the support removed.

Figure 10 is a view similar to Figure 4 of a form of construction that folds or collapses to a flatter position than the form shown in Figure 4.

Referring to the drawings, numeral 1 is the ring of a basketball goal to which the usual net is attached. The ring 1 is welded to the outer end of the leg 4 of the hinge 5, the leg 6 of the hinge having apertures or holes 7 therein for the reception of nails, screws or bolts 8 for attachment of the hinge to the backboard 9. The leg 6 of the hinge is provided with a stop or abutment 10, which abutment is a positioning and/or supporting base for the brace or support 11, the latter having a curled end 12 passing around the ring 1 and forming a pivotal mounting for the brace support thereon. The leg 4 of the hinge has a cut-out portion 13, thus providing space for the pivotal movement of the brace 11 and curled end 12 around the ring 1. The lower end of the element 11 is bent at 14 to form a vertically disposed portion 15 having a surface adapted to lie flush against the leg 6 of the hinge when the vertically disposed portion is in contact with the stop 10. The portion 15 is provided with an aperture 23 to receive a bolt 16 whereby the support is securely fastened to the leg 6 by tightening the nut 17, the bolt extending through the aperture 18 (see Figure 6) of the hinge leg 6 and having its head bevelled so that the face of the bolt does not protrude beyond the outer flat surface of the hinge leg 6 when the said surface is in affixed contact with the backboard.

In the modification shown in Figure 7, the curled end 12 of the support 11 is not pivotally mounted directly upon the ring 1, but instead is pivotally mounted or hinged on a pin 19 which extends through a curled portion 20 of the extremity of the hinge leg 4, and which curled portion is welded at 21 to the outer peripheral surface of the ring 1 along an interrupted arc thereof.

In the modification shown in Figures 8 and 9,

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the curled portion 12 of the support 11 encircles and is pivotally mounted upon an undercut portion of the ring 1, so that the curled end forms a part of the ring without protruding in the internal area thereof. Figure 9 shows the undercut portion 22 at the two contiguous ends of the ring 1 adjacent to the space 13 of the hinge leg 4, which leg is attached to the ring 1 at its outer periphery as shown in Figure 1.

In the form of the invention shown in Figure 10, the backboard attaching leg is shorter than the leg 6 shown in Figure 4, with a correspondingly shorter brace member 11 than shown in Figure 4, whereby the right-angled relationship of the hinge legs is maintained when the construction is attached to the backboard. Figure 10 thus presents a construction wherein the hinge legs fold or collapse to a flatter position than the construction shown in Figure 4. Obviously, the modifications shown in Figures 7 and 8 may be provided either with the hinge leg 6 as shown in Figure 4, or with the shorter hinge leg shown in Figure 10 that folds to flatter form.

In operation of the devices disclosed and described herein, the goal is packed for storing or shipping in substantially flat form as shown in Figures 3, 4 and 10. When it is sold, the purchaser installing the goal opens the legs 4 and 5 of the hinge 5 and moves the supporting strut or brace 11 rotatably on its pivot until the end 15 thereof meets the face of the hinge leg 6 and contacts the top side of the stop or abutment 10, and is thus accurately positioned. The bolt 16 is inserted in the hole 18 of the leg 6, and passed through the hole 23 of the support 11, the leg 6 and support 11 being secured together by tightening the nut 17 on the threaded end of the bolt 16. The goal thus assembled (with the usual basketball net thereon) is then securely fastened to the backboard 9 by applying nails, screws or bolts through the holes 7 of the hinge leg 6. In case the basketball goal is to be removed to another locality, the assembled goal is removed from the backboard, the nut 17 and bolt 16 are removed, the support 11 is moved rotatably on its pivot to enter the internal space of the ring 1, and the leg 6 of the hinge is collapsed to parallel or substantially parallel relationship with the hinge leg 4.

An important feature of the invention resides in the provision of the stop or abutment 10, shown in detail in Figure 6. This abutment is so located on the hinge leg 6 that when the end 15 of the support 11 contacts the top surface thereof, a right angle is formed between the hinge legs 4 and 6. In other words, the location of the abutment on the hinge leg 6 is predetermined so that when the support 11 is positioned thereon, the hinge leg 4 and the goal ring 1 fixedly secured to the leg will always assume a position normal or perpendicular to the backboard without the need of extraneous precise measuring or adjusting. In this way, the assembled goal is assured of being in the proper horizontal or level position relatively to the floor or court for basketball play. The abutment or stop 10 functions as a base for supporting the support member 11 thereon sturdily and positively in conjunction with the securing bolt 16 and nut 17 when the latter is tightened. As shown in Figure 6, the abutment 10 is formed integrally with the hinge leg 6 by bending a portion of the same upwardly. However, it is obvious that the abutment or stop 10 may be separately secured to the leg 6.

From the above description, it will be observed

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that I have provided a basket ball goal that is economical to manufacture, has no loose unreplaceable essential parts that may be lost, is strong and sturdy to withstand hard usage during play, is always assured of being in proper horizontal or level assembled position for play, and is collapsible in compact and flat or substantially flat form for economy of space in packaging, storing and shipping. It is obvious that a smaller box for packaging is a further economical advantage.

The goal ring supporting bracket as described and shown herein composed of the legs 4 and 6 of the hinge together with the brace element 11 thus defines two foldable end elements 6 and 11 and an intermediate element 4.

Various modifications will suggest themselves within the spirit and scope of the invention, and I do not wish to be limited as to any specific construction, except as defined in the appended claims.

What I claim is:

1. A basketball goal construction consisting of a goal ring and a supporting bracket therefor, the bracket being formed of two end elements and an intermediate element, said goal ring being rigidly connected to one end of said intermediate element in the plane thereof, said end elements respectively being foldable at the respective ends of the intermediate element and adapted to form with said intermediate element a right triangle, and means at the juncture of the end elements adapted to interengage to maintain the triangular formation.

2. In a basketball goal construction, a goal ring and a supporting foldable bracket therefor, said bracket consisting of a hinge element having a pair of legs hingedly connected to each other and a support element, a first leg being fixedly secured to the goal ring in the plane thereof, a second leg for fastening the goal to a backboard, the first leg having a cut-out portion adjacent said goal ring and defining an enclosed space therewith, said support element having one end thereof pivotally mounted on said goal ring and rotatable in said enclosed space when in non-secured position, the second leg having an abutment thereon, the support element being detachably secured at its other end to said second leg adjacent said abutment, the legs of the hinge element being foldable to approach the plane of the goal ring, and the support element being rotatable to lie within the goal ring to provide a substantially flat form for packaging and shipping.

3. In a basketball goal construction, a goal ring, a supporting foldable bracket therefor, said bracket consisting of two members hingedly connected together and defining a hinge member having a pair of legs and a brace support, one of said hinge legs having at its outer end a curled portion, the goal ring being secured to said hinge leg adjacent to said curled portion and in the plane thereof, a pintle in said curled portion, said brace support having one end pivotally mounted on said pintle, the other of said hinge legs having an abutment thereon, the brace support being rotatable to rest upon said abutment and be detachably secured to said second leg and adapted to form a right triangle with both legs when the goal construction is in use, and rotatable into the internal space of the goal ring when not in use.

4. A basketball goal construction, including in combination a goal ring, a supporting foldable bracket therefor, said bracket consisting of two members hingedly connected together and de-

fining a hinge member having two legs and a brace support, one leg of the hinge member having a cut-out portion at its outer end, a goal ring secured to said leg at its outer end along an arc adjacent to said cut-out portion and defining a closed space therewith, the goal ring having a portion of reduced diameter at said cut-out portion, said brace support having one end pivotally mounted on said portion of reduced diameter, and abutment means on the other leg of the hinge member to support the opposed end of the brace support when it is detachably secured to the said last named leg of the hinge member, said brace support and said legs being adapted to form a right triangle when the goal is in use.

5. The basketball goal construction set forth in claim 2 in which the abutment on one of the hinge legs contacts the other of said hinge legs

when the construction is in collapsed condition for storing or shipping.

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