

I am sure that some of you have been wondering about flying acts as they are one act that the general public seems to look for on every circus. I will endeavor to explain everything. I am deeply indebted to my good friend Bob Behee, who, with his brother and sister-in-law, were the Famous Flying Behees, for many years the featured flying act on the Ringling show. Bob gave me all of the dimensions and then looked over the finished model. In this article I am going to give you both the indoor (or under canvas) and the outdoor types of rigging.

Going thru the indoor rigging first. This is a frame that is hauled to the top of the tent or building. This frame is 40 ft. long and 5 ft. wide, The frame is in three sections (see Fig. 1). The points marked "X", are the points where connections are made. There is no definite distance for the two frame braces. It is important that the brace on the pedestal end is raised.

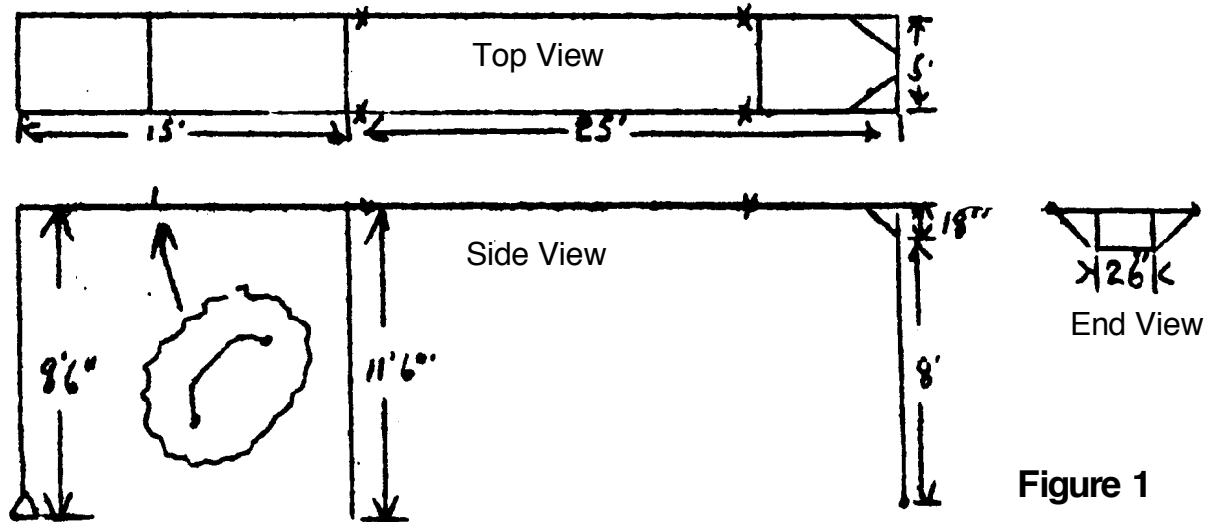


Figure 1

In the Big Top, we have a double block hung from the bale ring on the center pole on each side of the ring in which the rigging is to be hung. The other end of this block is hooked to an item called a "crows foot." The "crows foot" is made up of a small metal ring from which come five pieces of cable, which hook into the sides of the five cross beams of the frame (see Fig. 2). Those lines do not hook in symmetrically. When the frame is pulled up to the top of the tent the block is pulled fairly short. The pull rope on the block is tied to the mud block on the center pole. See Fig. 3 for the method of hanging.

As seen in Fig. 1 the fly bar hangs 11 ft. 6 in. from the frame. The bar is 30 in. across. The rings from which the fly bar hangs, are set at 32 in. apart. The catch bar hangs at 8 ft. Bob says this can be shortened. The 8 foot length is the length he used, because he is short and he had to catch Clayton in a triple somersault. Through experimenting with different lengths, they found that this was best length for them. The bar is 20 in. and the rings are set a 26 in. apart.

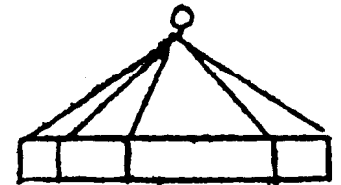


Figure 2

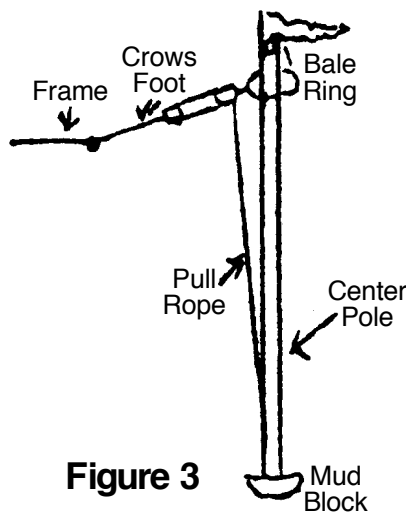


Figure 3

The pedestal board is next. There are several different types and here it is strictly your own preference. Fig. 4 shows the basic method of hinging from the frame. The distance between lines 2 & 3 is 3 ft. There is a distance of one foot between these lines and the two outside lines. Now here is where the differences come in. Either or both lines (1 & 4) can be removed. The Behee's rig had line one off and the board cut flush with line 2. On their outdoor rig the board was the same only with

Flying Return Act Rigging

DATE: None

SCALE: None

SCANNED & REVISED:
03/31/03

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Circus Model Builders

Drawn By
Thomas Carroll

DRAWING NUMBER

#0041

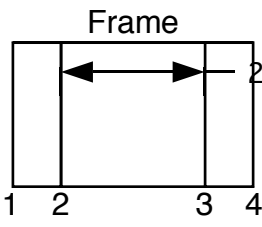


Figure 4

line 4 removed. The rope ladder was hung from line 2. I have also seen cases where both lines (1 & 4) were dropped and the board left with side wings. The most common method of holding the jump bar is shown on Fig. 5. Bracket is fastened to the rope by wrapping with 2.99 ft. This is not too practical from a model builder's point of view. Among the acts that use this are the Behees, the Zacchinis, and the Flying Harolds. Two types that use a frame are shown in Fig. 6. They are (6-A) Ringling type and (6-B) the Ward-Bell Flyers use on the Polack Bros. Western Unit. The frame or brackets should be made in such a way that the jump bar can be set at one foot intervals up from the platform up to about 5 or 6 feet. The pedestal board itself is about 9 in.

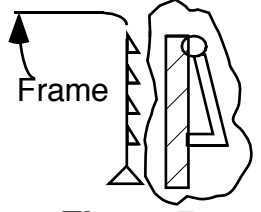


Figure 5

wide.

Now comes the fun. We will take it for granted that the franc is now hung, but before we

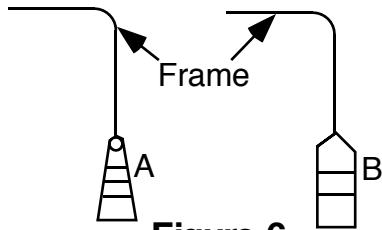


Figure 6

can use it, it must be guyed out. The first thing that goes on is an item called "quarters". These are lines coming from the four corners of the frame. These lines go to single pulleys hung from bale ring, thence down the side of the pole to a double block, the other end of which is fastened to, the mud block. When tightened up, this bends the frame up on the ends. (see Fig. 7). If the "quarters" were left off, the frame would buckle downward when the guy lines are tightened. I will not

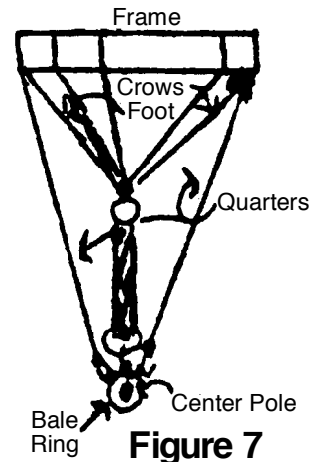


Figure 7

attempt to explain the way the rest of the frame is guyed out.

Fig. 8 shows the guy lines and the direction they go. All guys are terminated at double blocks. The other end of the blocks go to an item called a "bicket." A bicket is a piece of rope with a metal ring in the one end (see Fig. 9). Some acts use just a loop of rope instead of the metal ring. The other end of the rope is tied to the stake with a half hitch knot.

The pedestal board has to be guyed out also. The guy lines come from the hang ropes. If they came from the end of the pedestal board and there wasn't a hang rope there, the board would buckle downward on that end. When it is guyed out the board is pulled forward towards the catch bar. This is done so that the jump bar, at it different positions, is approximately fly bar.

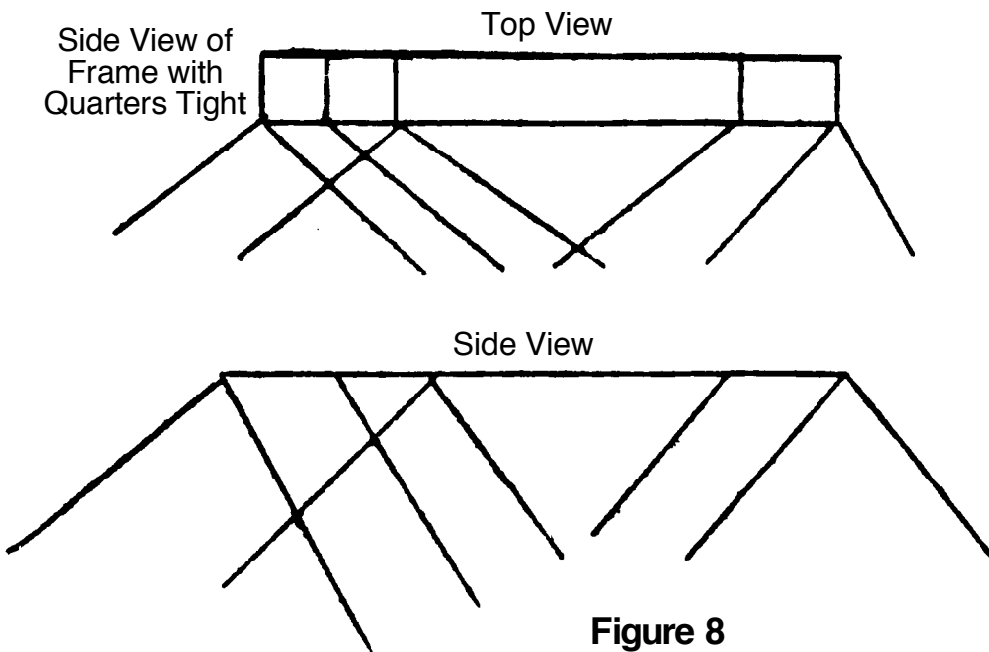


Figure 8

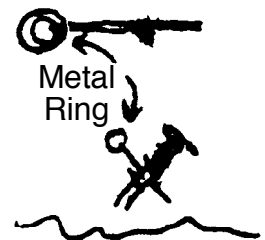


Figure 9

Flying Return Act Rigging

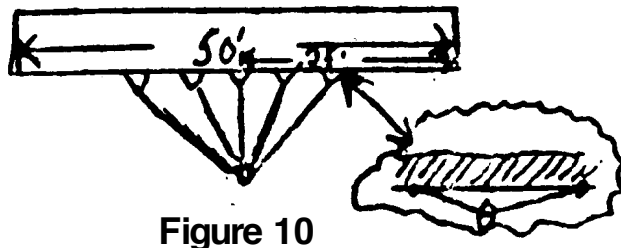


Figure 10

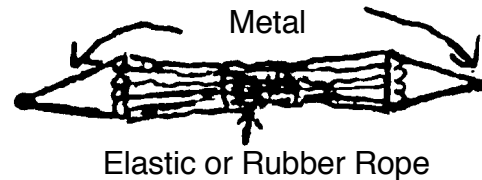


Figure 11

I guess we are ready to discuss the net. The net is 9 ft. wide. The main section is 50 ft. long, with an apron of 20 ft. on the platform end and one of 30 ft. on the catch end. The net is set so that the ridge rope between the 20 and 50 ft. sections is directly below the platform. The ends of the apron are usually pulled towards the rope of the quarter poles. There are six poles needed for the net itself. These are 6 feet each. There is one set at each of the four corners. The other two poles are set at the center of the net, where there is an arrangement similar to the crow's foot. This does not cover the full length of the main section but only a small portion of the middle. These are called spreaders, (See Fig. 10). The net is guyed out in the corners with four long blocks, one for each corner. One end of the block fastens to the ring that hooks the net pole and the other end to a stake and bicket. The center is slightly different in that instead of being terminated at a stake and bicket, it is fastened to an elastic arrangement shown in Fig. 11, and then to the stake.

The outdoor type rig is very much the same as far as dimensions go. Its main difference is the frame. Instead of being one frame, it is three crane bars each 7 feet in length, from which are hung platform form, fly bar, and catch bar respectively. The crane bars are set up on poles so that the platform and fly bar crane bars are at 31 ft. and the catch bar at 29 ft. 6 in. The poles are set so that they are 7 feet apart at the top, at the ends of the crane bar and spread where they touch the ground to slightly more than 9 foot so as to clear the net which must go between them. There are two guy lines coming from each end of the crane bar (or four lines per bar) and go out diagonally to a distance of about 25 feet, using the same system that is used on the indoor rig.

When setting this rig up, the catch is set up first and guyed out. There is a cable hanging from each side of the crane bar. The loose ends connect to the crane bar for the fly bar. A person gets at the bottom of each pole and just walks it up. With this line tight and the crane bar guyed out the two frames should be 25 ft. apart. To get the crane bar for the platform set-up, we have a single block fastened to each end of the fly-bar crane bar. The line through this block fastens to the crane bar from which we hang the platform. This is half hauled and half walked up. When guyed out it sets at 15 ft, from the fly bar.

The biggest complication is the net. The trouble is that there are no quarter poles out in the open to haul the apron up on. So for the catch end we have what is called an apron pole. This pole is 25 ft. long and two are required. These go to the end of the 30 ft. section. From the ring in the corners of the apron goes a rope that is tied to a stake. Then you put the pole into the ring and push up, push pole style. On the platform end there is a single block at each end of the crane bar. The line through here hooks into the rings on the end of the apron. Another line goes from the ring to a stake in the ground. The net kind of bags like a sack.

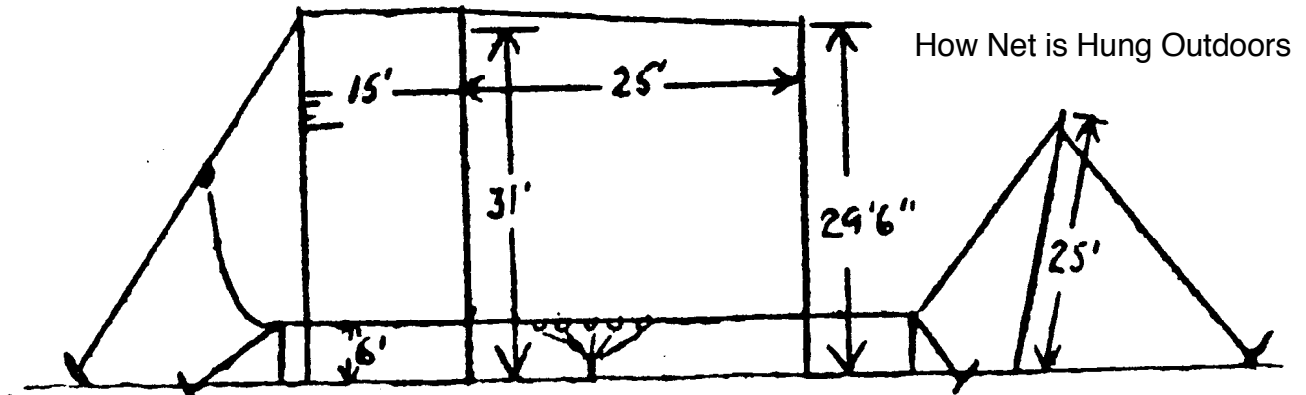


Figure 12

Flying Return Act Rigging