space between the top of the elevators and the binder-deck to carry the grain across this space without danger of its falling through on to the main wheel. Each canvas is driven from one large roller, the other rollers being smaller and free running. The rollers are of wood with steel spindles inserted at the ends; they are pinned through in two or three places in different directions to avoid possibility of splitting, and they revolve in close-fitting malleable collars which prevent grain becoming twisted about the ends and blocking the action of the machine. The canvas aprons are provided with cross slats at intervals to hold the grain straight and prevent it from slipping.

A difference in the method of driving the upper elevator canvas in two of the machines may be explained here. In the Massey-Harris it is driven from the top, making the side next the grain the tight side, and in the Frost and Wood from the bottom, making this the loose side. At first sight this might appear to have different effects upon the grain, but the construction of other parts counterbalances this difference and makes the result the same. On the machine, Fig. 9, a third roller is introduced into the elevator to make the upper ply of the canvas run at an angle, leaving a considerable space between the two plies. The slope of the elevator not being very steep, a tight grip on the grain is not necessary in dealing with ordinary crops. The grain is carried up on the tight side of the lower elevator canvas, and is simply held in place by the loose ply of the upper canvas. But when the crop is extra heavy, the larger amount of grain deflects this loose ply upwards to get more space, thereby making the tighter grip that is necessary for the extra weight. On Fig. 10, on the other hand, the slope is steep and a tighter grip is necessary, which is obtained by driving the canvas so that the grain side is the tighter. To provide for extra heavy grain, the upper elevator is made to float, that is, the supports of the rear end are set in slots in a fixed frame, allowing the entire elevator to yield with the pressure of the larger quantity of grain. The purpose of these devices is to give the machines capacity for handling the heaviest crops without becoming choked.