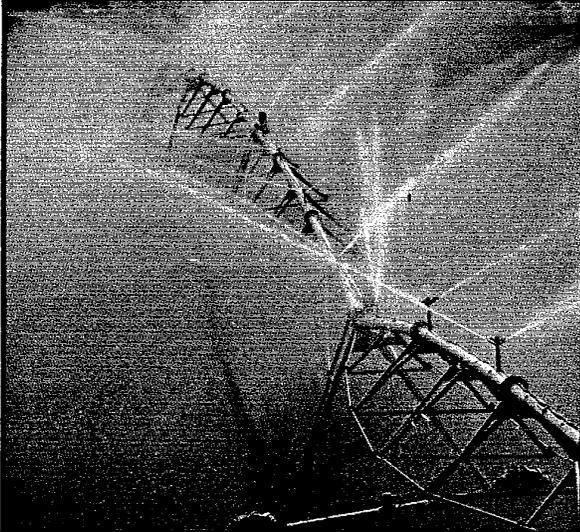
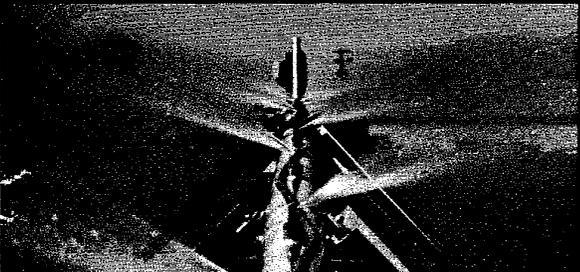


FIGURE 11 - TYPICAL WATER DISTRIBUTION PATTERNS AND NOZZLING ARRANGEMENTS AVAILABLE ON CENTER PIVOT SPRINKLER SYSTEMS. (COURTESY OF VALMONT INDUSTRIES).

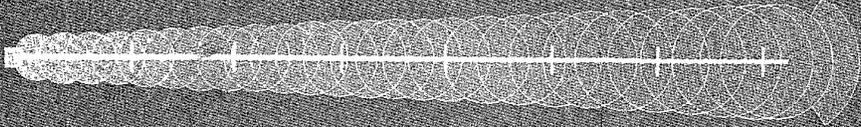
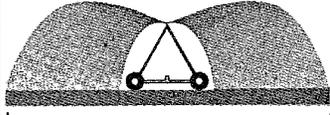
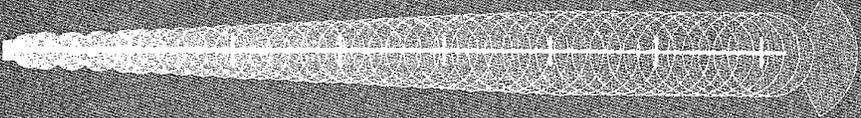
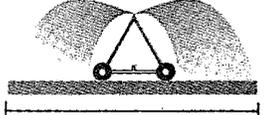
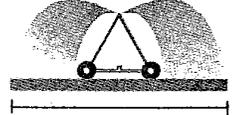
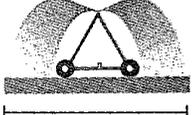
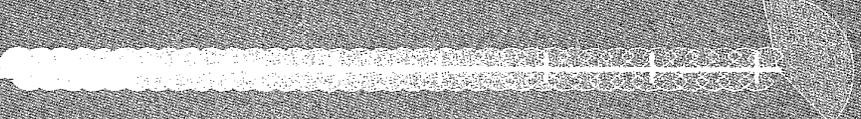
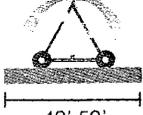
	<p>Configuration E Pressure: 60 psi outer end Spacing: 32' Std. Span 25½' Long Span</p>	<p><i>Impact sprinklers are evenly spaced along the pipeline, gradually increasing in size toward the outer end, providing the broadest area of water coverage, minimizing ponding and run-off, as well as excellent uniformity where there are significant changes in elevation.</i></p>
	<p>Configuration I Pressure: 60 psi outer end Spacing: 32', 21' Std. Span 25½', 17' Long Span</p>	<p><i>Configuration I has impact sprinklers with two different spacings from pivot to outer end. On standard systems the inner-spacing is 32 ft. and the outer-spacing is 21 ft. Spacing for long-spans is as specified. This configuration combines the features of increased sprinkler pattern overlap and low application rates while retaining the broadest area of coverage.</i></p>
	<p>Configuration V Pressure: 60 psi outer end Spacing: 32', 21', 10½' Std. Span 25½', 17', 8½' Long Span</p>	<p><i>Smaller sprinklers of nearly equal size are spaced progressively closer from pivot to outer end. Designed to operate at 60 psi at outer end. Area of distribution is less broad, but greater water pattern overlap maximizes uniformity and minimizes the effect of any sprinkler malfunction.</i></p>
	<p>Configuration VL Pressure: 40 psi outer end Spacing: 32', 21', 10½' Std. Span 25½', 17', 8½' Long Span</p>	<p><i>Designed for low pressure operation—40 psi at the outer end. Generally larger impact sprinklers are spaced progressively closer from pivot to outer end. Area of distribution is less broad because of the lower pressure. Has same overlap advantages as configuration above, as well as energy savings. Relative droplet size is larger, and least affected by wind.</i></p>
	<p>Configuration S Pressure: 20 psi outer end Spacing: 10½' Std. Span 8½' Long Span</p>	<p><i>Spray nozzles are uniformly spaced on top of the pipeline, and alternately spray either fore or aft. Operating pressure is 20 psi at the outer end. Advantages are substantial savings in initial investment for pumps, engines, etc., as well as sizeable energy savings. Pumping costs are reduced 10%-40%.</i></p>

*Larger droplets resist wind distortion.
There is more chance of soil compaction.
Smaller droplets enhance soil penetration.*

Top View

End View

Relative
Droplet Size

 <p><i>High pressure, impact sprinklers increasing in size toward the outer end.</i></p>	 <p>140'-160'</p>	
 <p><i>Similar to configuration E, but with two different spacings from pivot to outer end</i></p>	 <p>110'-130'</p>	
 <p><i>Smaller sprinklers of nearly equal size increase in number at the outer end.</i></p>	 <p>100'-120'</p>	
 <p><i>Similar to configuration V, but designed for low pressure operation.</i></p>	 <p>90'-110'</p>	
 <p><i>Spray nozzles result in relatively high application rates. Fore and aft arrangement of spray nozzles.</i></p>	 <p>40'-50'</p>	