This is made apparent in Figure 14. Beginning with three apples, the first, third and fifth layers are represented in (a) and the second and fourth layers in (b), and the box will contain 188 apples. If, however, the pack is begun with two apples as at (b) then the first, third and fifth layers will be represented by (b) and the second and fourth by (a). In this case the pack will hold 187 apples.

Of course the preferable method is the first, as it has fewer large spaces that detract materially from the appearance and permanency of the pack.

## DIFFERENCE IN SHAPE.

To bring home more forcibly the difference of shape in the same varieties, 25 specimens of eight common varieties were carefully measured for the maximum and minimum transverse diameter and for the diameter from the stem to the calyx. The results are given in the table below. It will be noted that in an apple so regular as the Mann there is still a difference of a quarter of an inch and out of the 200 apples measured only ten approach a perfect circle. It will readily be seen how important it is for the young packer to perceive these differences and make use of them in order to keep the apples tight and in alignment.

Another point may be noted. Few young packers appreciate how much less the longitudinal diameter is than the transverse. Advantage is taken of this to lower or increase the height of the apples in the box, by turning them on their side or on their end, and thus determine whether it will be a side pack or an end pack.

SEEK.				MANN.			
Specimen.	TRANSVERSE.		Longi-		TRANSVERSE.		1
	Max. Inch.	Min. Inch.	tudinal Inch.	Specimen.	Max. Inch.	Min. Inch.	Longi- tudinal Inch.
1	2·75 2·75	2·75 2·62	2·25 2·37	1	3·00 2·75	2·87 2·68	2·31 3·00
3 4 5	2 · 68 2 · 62 2 · 50	$2.50 \\ 2.50 \\ 2.37$	2·37 2·12 2·06	3 4 5	3·00 3·00 3·06	2·87 2·87 3·00	2·25 2·31 2·37
6 7 8	2·75 2·62 2·62	2·62 2·43 2·50	2·43 2·12 2·37	6	2·87 2·93 2·87	2·87 2·75	2·37 2·25
9	2·50 2·56 2·50	2·37 2·50	2·06 2·12	89 10	3·00 3·00	2·62 2·81 2·87	2·12 2·37 2·37
1 2 3	2·56 2·50	2·37 2·56 2·37	$2 \cdot 06$ $2 \cdot 12$ $2 \cdot 12$	11	2·81 2·87 2·93	2·62 2·75 2·81	2·25 2·50 2·31
5 3	2 · 62 2 · 62 2 · 43	$2.50 \\ 2.62 \\ 2.31$	$2 \cdot 12$ $2 \cdot 37$ $2 \cdot 00$	14 15 16	2·87 3·00 2·87	2·75 2·68 2·62	2·50 2·31
7 8 9	2·56 2·37 2·43	2·37 2·31 2·43	2·06 2·06	17	2·62 2·62	2·50 2·50	2·18 2·00 2·00
0	2·50 2·56	2·43 2·43	2·06 2·12 2·12	19 20	3·00 2·87 2·68	2·87 2·75 2·62	2·18 2·25 1·93
2 34	2·50 2·43 2·37	2·50 2·25 2·25	2·18 2·00 1·87	22 23 24	2·87 2·87 2·62	2·75 2·75 2·56	2·25 2·18 2·00
verage	2 · 62	2 · 37	2.06	25	2.75	2.56	2.06