thicker at the base and tapers, becoming thinner at the mouth. So far as I am aware, no one has ever made such measurements.

The "Vandusen" is a flat bottom (unnatural) foundation. The various specimens of this kind which were put into the sections were partially covered to prevent the bees from touching the covered portion. The remainder was left to the bees. In every case the bees changed the base from flat-bottom to natural. I have adopted a new method.

In the tables given below, the measurements are one ten-thousandth part of an inch.

Kind.	Base.	Wall at base	Wall hin. up	Base of foundation before putting in.
(a)	72 70 70	32 30 39	28 23 ?S	107 105 104
(b)	63 70 71	33 35 33	27 27 27 27 27 27	100 95 ೪೫
(c)	60 60 62	30 29 30	28 28 27	78 60 60
(d)	51 55 54	32 30 33	28 2,28	Could not get a piece large enough
(e)*	 	32 30 31	28 29 28	230
(Î) [*] .	 	30 32 33	88 88 88 88	50
(g)*	·····	3333 3333	30 28 30	170
(h).	57 50 62 1			
(i)	52 55 55	40 42 40	38 34 37	

Owing to the smallness of the piece which could be secured free from the base at either side it was impossible in this case to get a reliable measurement. It will be seen that as far, as the base is concerned, the measurements of (d) are practically as natural drone comb; the side wall is even a little thinner. No measurements of the side wall of natural worker comb have been made, and for this reason, the comparison has to be taken with caution, being betw en a worker side wall, built on Vandevort

*Impossible to measure.

foundation 12 ft. square to the pound, and a natural drone comb. The combs (c) (b), and (a) gradually increase in weight. The Vandevort foundation had a light base but a heavy side wall. In the above specimens of foundation, there is a vast difference in the amount of $4\frac{1}{4} \ge 4\frac{1}{4}$ section which can be filled by a pound of foundation.

an

sp:

ear

fai

W

fa:

to

th

of

m

is

01

sł

b

b N S

10

ť

Vith	the	e 4	square	ft	per.	lb.	. 36 se	ection	is can	be	nlled
••	**	61	r	••	~ 44	**	585	44	44	"	44
**	**	6] 10	· ••	**	"	• 6	90	46	66	**	••
44	**	12	44	**	"	46	100	**	**	• •	••
**	**	15	44	"	44	44	125	**	**	••	••

Upon the market in Canada that which will fill 36 sections costs about 50 cents per pound; and that which will fill 135 sections costs about 60 cents per pound. With the latter nearly four times the number of sections can be filled; yet the cost per pound is increased only 30 per cent. If only the question of cost of foundation per section had to be considered it would pay best to take the lightest.

	`````````````````````````````````````				
N	Vintering	From	the	Star	Apiary.
				A	Dickson.

How to winter successfully is the be How to winter successful to we knot about it? Well, Mr. Editor, I will ender vor to give my bee keeper friends a fer pointers. Just allow me to say here i have tried a good many ways of wintering What I mean bees, but not satisfactory. is to winter without loss. I have a cellu which was built about thirteen years and I tried to winter bees in it for two succes sive winters after it was built, with result as follows :- Losses for first winter, fortyfour; losses for second, sixty-nine; sol gave the new cellar up for a bad job, at went back to the old cellar again, but t winter in it there was a loss every year. Three years ago I was bound to make the new cellar a success, if possible. Int to work, and with considerable study at experience, now have a cellar that I wput against any in Canada to-lay si success. I have wintered for two years The first winter 100 colonies was it. taken out, lost one, and it was queens Second winter, 128, and lost one for sr reason. It would do your heart godt see the bees; when they came out they wa ready for business. If bee-keepers went make bee-keeping a success, the colum must come out as good as they went in C Bees that come out of WI better.

804