so much addition to the ordinary cares, which are of themselves as great a burden as should be borne. Not only relieve the hands of the butter making task, but take it by this change entirely off the mind, and a wonderful improvement takes place in the whole household-atmosphere.

AYLMER.

## THE DUAL-PURPOSE COW.

ED. Hoard's Dairyman:—In passing, I must say that I do not agree with all dairymen as to the ideal type of the dairy cow. I believe that many of them are carrying the idea of both narrowness and leanness to an extreme, and that some day, not far off, a heavy penalty will be enacted because of the extrome to which both ideas have been carried. But this point is not relevant to the subject that is being discussed.

The extremest type of beef cow is not usually a good breeder, nor is she a good nurse. Those then who breed this cow should, it seems to me, be content with high attainment in beef production, and therefore should not push the extreme beef form to the extent of injuring the powers of reproduction. Now, this cow must practically produce all the beef that is wanted to feed the millions of the Nation, on the assumption that there is no place for the dual-purpose cow. This she cannot do unless she is kept and numerously kept, on arable farms. The best authorities are agreed that the palmiest days of open ranging are a thing of the past. They believe that cattle production is decreasing on the range, and that it will still further decrease, because of the encroachments of the sheep industry. While the view thus expressed is doubtless correct, I do not expect to see cattle production decrease to any great extent in the range country, since the mountain valleys are being made to produce much food for live stock through the aid of irrigation. But is is pretty certain that cattle production cannot be greatly increased on the ranges, because of the influence of rapidly increasing bands of sheep upon the pas-And it is equally certain that our populatures. tion is increasing very rapidly. Whence then is the additional beef to come from that is wanted to feed those coming millions? The second source of beef supply is the pastoral farm. But it is fair to infer that pastoral farms, like the ranges, are stocked to their full capacity. The only place,

therefore, from which these supplies can come is the arable farm.

This brings up the question : How shall beef be grown on the arable farm? All will concede that it can come from two sources, that is to say, from the beef cow or the dual-purpose cow. Now to the writer it is evident that it cannot come from the straight beef cow without much relative loss to the farmer. In other words, beef cannot be grown on the arable farm from the straight beef cow that will bring the farmer as high a return as he will get from his dual-purpose cow in meat and milk. The return will not be nearly as much from the straight beef cow as from the dualpurpose cow. The former will, of course, produce but one calf per year.

Now suppose that the calf weighs 750 pounds at the age of one year, which is a good average weight, and that it sells for \$4.75 per hundred in the market, which is probably a fair average price for such meat. The entire return from the cow during the year will be \$35.63. That is all that the owner gets from feeding that cow and calf for one year. It is clear, therefore, that he makes but little profit. The dual-purpose cow will produce a calf that will weigh, at least, 700 pounds at one year, and that will sell for \$4.50 per The calf then is worth \$31.50 in the hundred. But the cream from the cow will bring market. The return for the in a return of \$30 additional. season, therefore, from the dual-purpose cow is \$61.50, as against \$35.63 from the straight beef cow. The comparison is, I think, a fair one. Of course, the extra labor is not to be lost sight of.

Now remember, please, that I have been speaking only of good averages. Let no man seize upon those figures as representing my views of the highest possible production from the dual-purpose cow. Are we not therefore shut up to the conclusion, first, that the additional beef wanted to feed the increased millions of the nation must come chiefly from the arable farm; and second, that it must come chiefly from the dual-purpose cow on the arable farm? Why then should I be held up to ridicule for advocating the cause of the dual-purpose cow?

Wherein I ask will such advocacy injure dairymen? Push the idea that there is no dual-purpose cow to its utmost limitations. Grant for the time being that every farmer accepted that view, what, in time, would it mean to the dairy interests? It would mean that only straight dairy cattle or