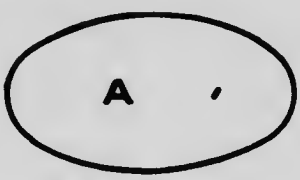
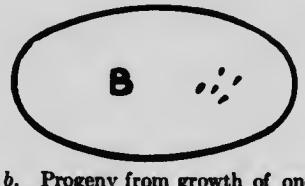
Since a low temperature retards fermentation the sooner milk is separated and the cream cooled the better the quality will be. At temperatures between 60°—100° the flavour changes very rapidly because bacterial growth is rapid; between 50°—60° the change is much slower,

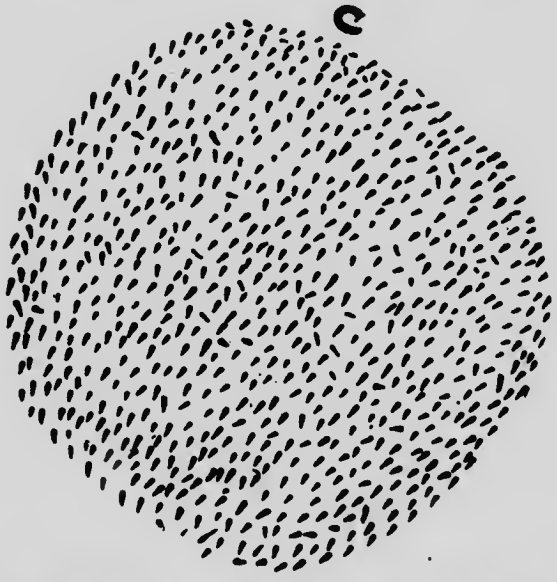


a. Single bacterium.



b. Progeny from growth of one bacterium in 24 hours in milk at 50 degrees of temperature. The increase is five.

while below 50° it is almost checked. The limits of growth may be fixed at freezing point and 110 Fahr. In farm dairy work it is not practicable to adopt high temperatures to check the growth, consequently a low temperature is the only available means of retarding bacterial growth and thus preserving the fine flavours in milk and cream.



c. Progeny from growth of a bacterium in 24 hours in milk at 70 degrees of temperature. The increase is 750.

I know of no simpler or more effective means of cooling cream than that shown in the following illustration which is self-explanatory. Have the cooling tank between the well and the watering trough. The water can then be pumped into the tank and the overflow of the warmer water goes to the trough. Ice in the water adds to its cooling efficiency. The ordinary "shot gun" can affords a suitable receptacle for catching the cream from the separator and is also a good form for placing in the