

## NEW PROCESS FOUND FOR RIPENING CANDY

Candy filling may be kept soft for months inside its chocolate coating by a process discovered by H. S. Paine and J. Hamilton, of the U. S. Bureau of Chemistry. They have found that the addition of invertase extract makes unnecessary the ripening process which causes delays in candy manufacture.

Invertase is an enzyme found in nature that has the power of changing cane sugar back to simple sugar like dextrose. While fondant seems to be a solid it is really composed of microscopic bits of sugar held together by a film of syrup. It is about the consistency of putty and has a number of its physical characteristics. When fondant is stretched out it looks dry and stiff. When it is worked together between the fingers it becomes oil and moist.

The action of the invertase dissolves a number of the sugar crystals making the syrup film constant around them. This assures the creamy center which is so much to be desired.

Cream of tartar added to the candy would give the same creamy filling but the addition of the acid spoils the taste, and does not do away with the process of ripening, however, as invertase does.

According to the old rule for fondant, handed down from master to apprentice, fondant had to be cooked slowly, allowed to cool thoroughly, beaten with a wooden paddle. Then it was put into stone jars and allowed to ripen for several days. After this it was taken out, melted, and poured into starch molds. It was allowed to ripen in the molds for several days before it was dipped into chocolate. The chocolate coating acts as a protection against drying. Inside this air proof case inversion takes place to a slight degree, that is, the sugar particles dissolve somewhat in the syrup.

By the addition of invertase when the flavoring is added the ripening process is not necessary. The fondant is cooked, beaten with a wooden paddle, remelted, poured into molds, and dipped in chocolate all in the same day. Chocolates treated in this way have been tested after six months and 6.8 per cent of water has been found present in the fondant.

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WOULD BUILD SHIPS WITH SOFT ENDS

By building ships with "soft ends", E. F. Spanner, British ship construction specialist, would reduce the damage from ramming in collisions.

Mr. Spanner advocates using vertical instead of horizontal plates for the bow structure, with the lines of weakness formed by the joints of the shell and deck plating arranged in such a way that these joints would fall in a more or less predetermined way in case of collision. The resistance to shearing offered by the fastenings in the laps and other joints would be such that the gradual overcoming of this resistance and the crushing back of the bow structure would absorb the energy of motion of the ramming ship so that she would be brought to a stop without piercing the side of the vessel.

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Lobsters walk on tiptoe when travelling in the ocean.  
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