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that get through sieves because they are so nearly like the vegetables with which they are mixed. X-rays would help to eliminate these jawbreakers.

X-rays might possibly be used also on the finished packages, cans, and bottles, to hunt down defective seals, bad corks, and other leaks that might admit contamination or lose contents. Sometimes, too, after long storage, certain types of internal spoilage occur; X-rays might be used for re-inspecting such material before shipping, to eliminate packages that were good to begin with but have gone bad while waiting to move.

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Science News Letter, July 23, 1938

POPULATION

Oldest American Cities Are on the Pacific Coast

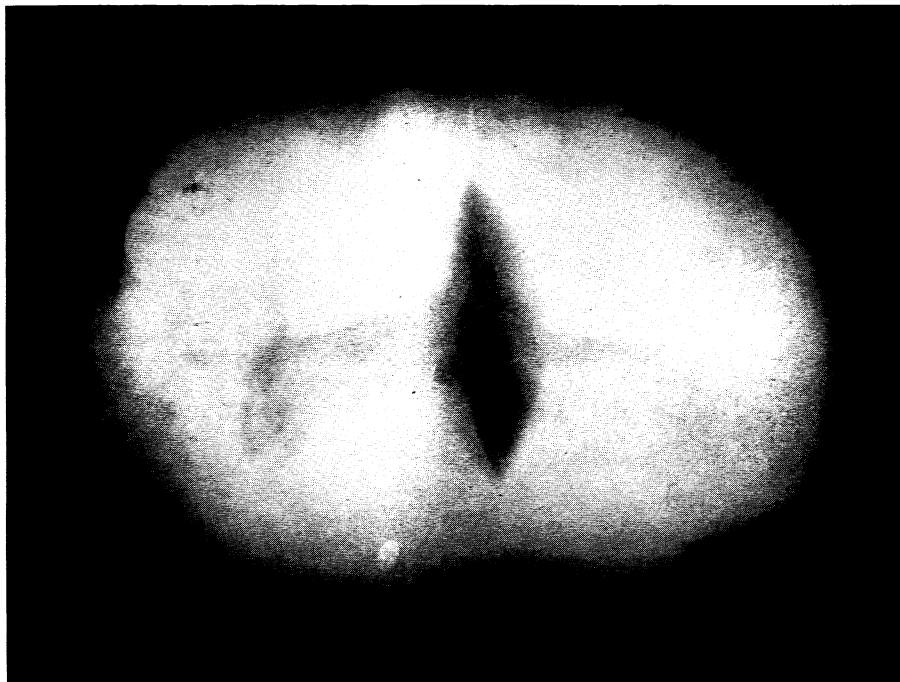
RESIDENTS of St. Augustine, Fla., may be surprised to hear it, but Long Beach, Calif., has just been pronounced an oldest city—the oldest, in fact, of America's large cities, with San Diego running a close second.

These two are the oldest, from the standpoint not of date of settlement, however, but of age of their residents. Metropolitan Life Insurance Company statisticians are the authorities for the new oldest city titles. They report that almost one-tenth—9.2 per cent.—of Long Beach's population is over 65 years old. In San Diego the proportion of residents over 65 years is 9.1 per cent.

Spokane, Wash., is third in order of age of its inhabitants, and, in fact, all the Pacific Coast cities have pretty old populations. The reason, of course, is not hard to find. An equable climate and facilities for rest and recreation for which these cities are distinguished attract old people who have retired and are able to live on their income or savings. For the same reason, the highly industrialized city of Gary, Ind., is the youngest of all the nation's cities of over 100,000 population. Only 1.7 per cent. of its inhabitants are over 65 years old.

Science News Letter, July 23, 1938

Princeton University has acquired a rare Moslem medical book written in the tenth century and carried off from the Near East by Crusaders.



FALSE HEART

The eye of the X-ray said: "This potato is hollow-hearted, unfit for baking."

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Wilson, Henry Van Peters, 1863-

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1938. Behavior of the epidermis in sponges (*Microciona*) when treated with narcotics or attacked by aquarium degeneration

J. Exp. Zool., v. 79, no. 2, Oct. 5

The epidermis including the marginal films, peripheral sheets of cytoplasm with a single layer of nuclei, is syncytial in reunion sponges (*Microciona*). The cytoplasm is, typically, reticulate in appearance.

Under the influence of chloral the syncytial epidermis may break up into cell-like pieces, owing to excessive vacuolar degeneration between nucleated regions. The degeneration is traceable to changes in the microscopic architecture of the cytoplasm. In such cases the nuclei seem to exert a directive influence on the progress of vacuolation. The cytoplasm eventually loses its optical structure and the nuclei also degenerate. Vacuolar degeneration may be diffuse without the production of cell-like pieces.

Chloretone has a similar but not identical effect. A non-nucleated area may divide into pieces, showing that nuclear control over vacuolation and consequent cytoplasmic division is unnecessary for such division. Aquarium degeneration may lead to results very similar to those induced by drugs.

Epidermal lines are again recorded and interpreted as structures produced through rearrangement of the meshes (alveoli probably) of the epidermal membrane.

Histology, epithelial tissue

Microciona

Physiology, degeneration

No. 7155. Issued by The Wistar Institute, June 27, 1938

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