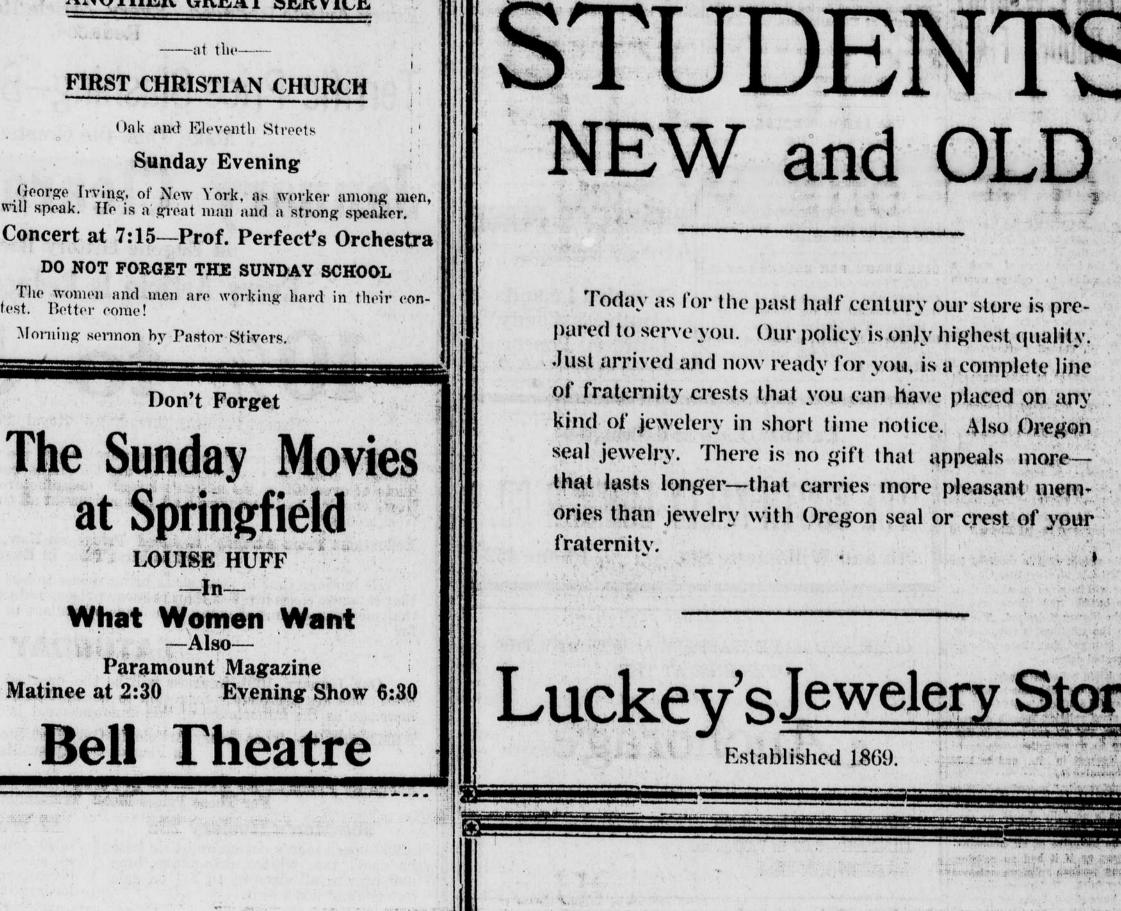
OREGON DAILY EMERALS





What Is Vacuum?

FTHE traffic policeman did not hold up his hand and control the automobiles and wagons and people there would be collisions, confusion, and but little progress in any direction. His business is to direct.

Luckey's Jewelery Store Established 1869.

The physicist who tries to obtain a vacuum that is nearly perfect has a problem somewhat like that of the traffic policeman. Air is composed of molecules-billions and billions of them flying about in all directions and often colliding. The physicist's pump is designed to make the molecules travel in one direction - out through the exhaust. The molecules are much too small to be seen even with a microscope, but the pump jogs them along and at least starts them in the right direction.

A perfect vacuum would be one in which there is not a single free molecule.

For over forty years scientists have been trying to pump and jog and herd more molecules out of vessels. There are still in the best vacuum obtainable more molecules per cubic centimeter than there are people in the world, in other words, about two billion. Whenever a new jogging device is invented, it becomes possible to eject a few million more molecules.

The Research Laboratories of the General Electric Company have spent years in trying to drive more and more molecules of air from containers. The chief purpose has been to study the effects obtained, as, for example, the boiling away of metals in a vacuum.

This investigation of high vacua had unexpected results. It became possible to make better X - ray tubes - better because the X - rays could be controlled; to make the electron tubes now so essential in long-range wireless communication more efficient and trustworthy; and to develop an entirely new type of incandescent lamp, one which is filled with a gas and which gives more light than any of the older lamps.

No one can foretell what will be the outcome of research in pure science. New | knowledge, new ideas inevitably are gained. And sooner or later this new knowledge, these new ideas find a practical application. For this reason the primary purpose of the Research Laboratories of the General Electric Company is the broadening of human knowledge.

General Office Company Schenectady, N.Y.

We buy with the idea of clearing own shelves ever few weeks. In doing so we are able to get the latest packs and especially the latest in prices. Then we are able to give to our customers the

Our Grocery Line Offers a

New Supply of Stock

for the New Year

Best Prices in Town

Our goods bear the quality mark and always come up to expectation. They are packed by reputable companies that set the standard. Quality counts more in the grocery line than in most any other.

Your health and happiness depend upon good things to eat. We have them.

A fresh line of vegetables and fruits are always on hand. Do not overlook that vegetables and fruit are very essential during the winter.

WE CATER TO STUDENT TRADE.

L. D. PRICE, Prop

are pile hours

Minnes Constants

Co.

Phone 246

ORN RITTER MINE

Table Supply

Phone 246

16-116-D