

RADIO

September 22, 2:15 p.m., E.S.T.
NEW FACTS ABOUT FEET—Dr. Dudley J. Morton of Columbia University.

September 29, 2:15 p.m., E.S.T.
A DOG'S WORLD—Dr. Carl J. Warden, psychologist, of Columbia University.

In the Science Service series of radio discussions led by Watson Davis, Director, over the Columbia Broadcasting System.

ASTRONOMY

Largest Gaseous Nebula "Found" By New Telescope

See Front Cover

THE photograph of the great celestial cloud known to astronomers as the Eta Carinae nebula taken with the Harvard College Observatory's new 60-inch reflecting telescope at Bloemfontein, South Africa, is for scientific purposes practically a new discovery. This photograph appears on the front cover of this week's SCIENCE NEWS LETTER.

Eta Carinae is the largest gaseous object in the sky that shines with its own rather than reflected light. (See SNL, Sept. 12, for account and pictures of red nebula which reflects light of Antares.) Astronomers have known it for some time, but the powerful new telescope shows so many new details that the new photographs amount to an introduction.

This nebula is famous as the home of a great nova of many years ago, now gone back to its former middle-class astronomical obscurity. In this region also are many exceptionally hot stars.

Science News Letter, September 19, 1936

From Page 180

German chemists in the main have little to do with this problem. What food we can grow we find a ready market for—as food.

Whereas American chemists are trying to turn food into industrial products we are trying to turn waste products of industry into food. The problem, as you can realize, is almost a complete opposite of yours.

For example, the chemical process which I know best is the method of utilizing waste wood 100 per cent. The chemistry of the problem has been simple, but the application on a mass-production, economical wide scale has been achieved only with difficulty.

We are now able to turn, however, waste wood into digestible carbohydrates of the sugar-type to the extent of from

60 to 66 per cent. On the way through the process we obtain 5 per cent acetic acid which is about the same amount as obtained directly by the distillation of hardwood. And finally we obtain some 30 per cent of lignin which can either be converted into charcoal or pressed into wall board, as you call it, which requires no binding to hold it together.

The problem, you see, is related to the changed commercial trading of the world today over what it was some years ago. The high trade barriers of the world's nations today may have vast implications in international relations. But I am hardly competent to discuss that phase of the subject. What I can say is that many nations are now too poor to buy their raw materials and have turned to the chemist to make them in his laboratory. The accompanying spur and encouragement to chemical research in continental Europe is obvious.

Is the day of the individual inventor passed? No, decidedly not. The growth of the great research laboratories of industry throughout the world may seem to indicate that the lone inventor has no longer an important role. But this

is not the case. The lone inventor still can, and does, conceive basic processes and ideas. The function of the large laboratory is, of course, to think of these ideas if it can but if some new thing comes along, to take it and aid it.

Through the very difficult trying days when it is turning from an "infant" to adult "manhood" and goes out into the world to compete with other inventions, the resources of a large laboratory appear, now, to be quite essential.

Science News Letter, September 19, 1936

Swarming bees sometimes choose queer homes, such as squirrel dens, church belfries, or empty barrels.

A bee farm in southern Germany raises bees in order to extract their poison, which is used in treating rheumatism.

A library of Oriental documents now being assembled at the University of California is expected to become an outstanding collection in this field.

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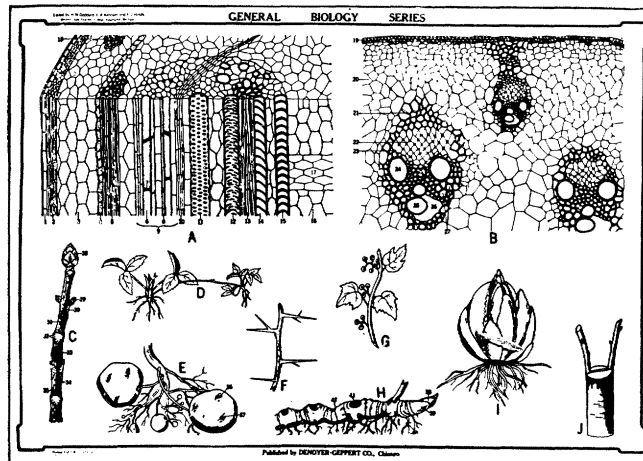


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