longed physical stress as evidenced by athletic prowess is found most commonly among the over-weights. An exception to this is seen in long-distance athletes among whom underweight is commoner than overweight.

"The greater the degree of under-

weight on entry, the greater the likelihood of invaliding from the Service on medical grounds.

"It is uncommon for overweight individuals to become underweight and vice-versa."

Science News Letter, July 28, 1934





Of Dragons

WE LIKE to identify creatures from the scary fairy-tales of our childhood, or of the race's childhood, with actual living monsters, even though we meet them when we are grown-ups!

Thus with dragons. When the zoological gardens in Washington and New York acquired some new giant lizards from Komodo recently, nothing would do but they must be dubbed "dragonlizards." These fearsome firebreathing monsters that rumbled and puffed through the folk-myths of the whole world from the legend of St. George to the tales of ancient China, were more real in our still-childlike imaginations than the almost unknown flesh-andblood beasts crawling in the jungles of an almost unknown East Indian island. We had always had a shadow of a dragon lying across our path, and we were delighted to find a creature to fit it, even though it was really hardly big enough.

Unimportant, that the real dragons are very rare. So were the dragons of mythical antiquity. Not every cave or forest could boast one, nor every maiden be menaced by one, nor every stout young man slay one. You had to live very far away, and be a princess, and your rescuer had to be either the son of a king or the son of a god.

And in some parts of the world there were good confirmations of the one-time existence of dragons. In China especially could plenty of dragon's bones be found—fossils of the longgone dinosaurs, that washed out of the weathering soft rocks as rivers ate away at their banks. The Chinese were scientists enough to recognize them as bones; poets enough to clothe those bones with terrifically fearsome flesh. Some bird and mammal entered into

## License Granted To Make New Arthritis Vaccine

NEW kind of vaccine for the treatment of the kind of rheumatism which physicians call "chronic infectious arthritis" has been developed by Drs. Bernard Langdon Wyatt and Robert Alan Hicks of Tucson, Ariz., in the course of more than two years' investigations.

The vaccine is of a special type and is made from microorganisms belonging to the streptococci group. It is given by injection into the veins in selected cases of chronic infectious arthritis.

While great benefits have been reported by a considerable number of physicians throughout the country, Drs. Wyatt and Hicks state that it is not to be regarded as a cure-all and that patients should be selected for this treatment in the manner described by them.

The Wyatt Clinic Research Laboratories have been licensed by the United States Government to manufacture the vaccine. This does not mean that the federal government guarantees the safety or effectiveness of the vaccine. It does mean, however, that so far as the government can control the conditions surrounding its manufacture and distribution, the vaccine is safe and will produce the results claimed for it in treating the disease.

## Must Be Licensed

Biological products of this type, vaccines and serums for prevention or treatment of disease, may be sold in interstate commerce only when licensed by the Secretary of the Treasury. The licenses are issued on the recommendation of the National Institute of Health of the U. S. Public Health Service

Among the regulations which must be met before a license is issued are the following: The product must be manufactured in suitable physical surroundings, that is in a room by itself and separate from rooms or laboratories where diagnostic tests are being made; the manufacturing laboratory must be in charge of a competent professional staff; and the product must be safe and effective, so far as can be told.

Science News Letter, July 28, 1934

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## Spectroscope Used To Detect Lead in Body

LEAD may be detected in the human body in a tenth the usual time for such a test by means of the spectroscope, it appears from reports of Prof. J. Stuart Foster of McGill University, Montreal, and Prof. Jacob Cholak of the University of Cincinnati to the Second International Spectroscopy Conference held at Massachusetts Institute of Technology.

While qualitative determination has been possible for some time, exact quantitative measurement has been exceptional without the use of the spectroscope. Both scientists also pointed out that chemical analysis heretofore used requires anywhere from 10 to 14 days while the spectroscopic analysis is possible in a period varying from 24 to 48 hours. This method also requires less tissue for the test.

Prof. Foster explained that the tests are made by a comparison of the intensity of the lead spectra with that of magnesium in the same sample being tested, in this case, an amount of spinal fluid. Using known lead concentrations to add to the spinal fluid and establishing a relation between the above ratio and the lead concentration, it is possible to detect one hundred millionth gram of lead per cubic centimeter.

Prof. Foster hopes to apply this method to the study of lead as a possible cause of multiple sclerosis.

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