Gnats Threatening Sight of Children

Entomology

Fifteen hundred children in the Coachella Valley Union High School at Thermal, California, suffering with serious conjunctivitis, or pink eye, due to the ravages of the California eye gnat, have caused the House Appropriations Committee to insert an item of $12,000 in the Second Deficiency Bill for the purpose of allowing experts from the U. S. Bureau of Entomology to go out there to see if they can destroy this pest.

A letter to Dr. C. L. Marlatt, chief of the Bureau of Entomology, from E. P. Carr, president of the Coachella Valley Mosquito Abatement District, was read into the record, according to hearings before the committee, just issued.

The gnat, known scientifically as *Hippelates pujio,* is said to have increased to an alarming extent in the Coachella Valley in the last five years.

It hovers in swarms about the eyes, noses and mouths of persons and stock. Small children are especially helpless against it. Over one-half the school children in this region now have serious eye trouble caused by the gnat, and ten per cent. of them have contracted chronic trachoma.

The district and the State of California have both done all that they can do, but have not been able to locate the breeding places of the gnat. The president of the district declared:

"Basic and preliminary scientific problems of life history must be worked out, we believe. Such pioneer research work is of national importance and is more than our local organization can compass."

Representative Phil D. Swing, Republican, of California, has declared in a statement to the committee that these were no ordinary gnats. "My people are a hardy, sturdy type of pioneers and are able to resist any ordinary inconvenience such as would come from ordinary flies, gnats, or mosquitoes," he said. "This thing is entirely new. The belief exists that these gnats came from some foreign country through the importation of date palms. Unless it is controlled it will render that part of the country uninhabitable."

Common house flies, according to Dr. Marlatt, act in Egypt somewhat in the manner of this Coachella Valley gnat. They will swarm about the eyes, causing all sorts of eye troubles.

Florida is also having some trouble with eye gnats, he said.

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Diesel Engines—*Cont'd*

roughly a third of that of the steamship, and the advantage is cumulative, extending into every phase of the ship's operation."

Not only does the oil engine reduce the fuel bill, but it greatly reduces the number of men required in the engine room. In ships of this type the stoker sweating in the bowels of the ship in a stoke hole, with the temperature often well over 100 degrees, is a thing of the past. Possibly the greatest advantage of such ships is the amount of coal bunker space which the oil engine releases for cargo or commodious passenger quarters. In large ships the fuel takes less than a third of the space which coal would require to obtain an equal cruising radius.

Developments in the marine field indicate that the familiar letters S. S. before the name of a ship, indicating steamship, will be eliminated, as the Diesel engine has proved its greater efficiency for practically every type of ship from the small yacht to the largest ocean liner, and the steam boiler is rapidly becoming an obsolete installation.

While the use of the oil engine in land and air transportation is still in its infancy, the stationary oil engine has secured practically a monopoly for pumping on long pipe lines, and its use for large power plants is rapidly increasing. There seems to be no field in which theoretically the oil engine cannot be used more efficiently than (*Turn to next page*)

League of Nations to Broadcast

Radio

Broadcasts by short wave radio of speeches from the League of Nations, especially for the American continent, Japan and Australasia, will be sent out from Holland next month. This announcement was made by the Federal Radio Commission, following the receipt of a communication from the Secretariat of the League at Geneva. Telephone lines will carry the words of the speakers from Geneva, Switzerland, to Kootwijk, Holland, where a powerful short-wave station is operated by the Dutch Postoffice. It has the call letters PCLL, and uses wavelengths of 18.4 and 38.8 meters.

While the broadcast will be of an experimental nature, it is believed if the reception is at all clear a regular broadcasting program will be worked out. International broadcasting is difficult because of the different languages of the radio audiences. The experiments of the League of Nations in March will attempt to reach certain sections of the world where reception conditions are good. A particular effort will be made to reach audiences in North and South America, Japan, Australia and New Zealand with programs given in the language of each country.

The League of Nations has already conducted certain experiments along this line, and reports have been received from 92 listeners in five different continents. These first experiments were mainly for the purpose of receiving technical reports from professional radio operators, but many individuals reported that the reception was entirely clear from their loud speakers. The broadcast in March will be the first attempt to reach particular regions with special programs.

The schedule as announced is as follows: to the American continent, March 12, 19, and 26, one hour, from 5 to 6 p. m., in English, French and Spanish, on a wave length of 38.8 meters; to Japan in Japanese every Wednesday, March 13, 20 and 27, 30 minutes from approximately 8:40 to 9:10 p. m., on a wave length of 18.4 meters; to Australia in English March 14, 21 and 28, 30 minutes on the same wave length, and at about the same time.

The Secretariat of the League of Nations said that while these broadcasts were purely of an experimental nature, it was quite possible that regular programs would be broadcast internationally if the reception of these first programs in March is clear.

Science News-Letter, March 2, 1929

An expert says that in many workshops the natural light is cut down one-fourth by dirty window panes.

Pennsylvania is the only state with a mineral production worth more than a billion dollars a year.