

Boiler Works At 3,375 Lbs.

Physics

Steam at a pressure of 225 atmospheres, or 3,375 pounds per square inch, is generated in a new battery of boilers recently installed at the Siemens-Schuchert Works at Charlottenburg. The installation has attracted considerable attention among German power engineers because of a number of unique features it involves. The design was developed by an Englishman, Benson, but the German plant is its first construction on a large industrial scale.

Each boiler consists of a high, relatively slender octagonal tower. There is an open interior space, surrounded by the water tubes. Coal dust is used as the fuel. This is blown in at the top of the tower, together with a blast of pre-heated air, and combustion takes place in the central open space, generating an unprecedentedly high firebox temperature, and producing steam at a pressure of

over 3,000 pounds per square inch and a temperature of 450 degrees Centigrade.

At the bottom the small amount of ash falls out, and the combustion gases are turned back to warm up the pre-heater for the air blast, which is raised to a temperature of 400 degrees Centigrade before it enters the combustion chamber. So completely is the heat used up that the outside of the towers are said to be but little warmer than the surrounding air.

No firemen or boiler tenders are required, for the coal dust, air and water supplies are all regulated electrically. There is not even any boiler house; the towers stand out in the open. The elimination of a shelter for the boilers of course effects an additional saving in installation costs.

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Baths Cure Seasickness

Medicine

When the ship begins to pitch and roll and you feel waves of seasickness overwhelming you, try a salt water bath. The water should be from 90 to 95 degrees Fahrenheit, its specific gravity 1.020.

Lie in the bath with your eyes blindfolded, your body supported lightly at shoulders, buttocks and back of head, with the toes just touching the end of the tub to keep the legs from floating. Stay in the bath for a half hour, an hour, or longer if necessary. This procedure gives great and usually permanent relief within a short time.

This method of treatment was worked out by Dr. R. A. Bennett, who used it in extreme cases where exhaustion from seasickness was becoming dangerous. The bath moves as the ship does, but the water has not time to respond to the motion, so it and the patient immersed in it remain fairly motionless. It is this relative immobility and not the sedative effect of the bath that is responsible for the relief it gives.

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The white rhinoceros, the third largest land mammal in existence, is becoming scarce.

The United States imported \$2,900,000 worth of iodine last year, all of it from Chile.

Blindfold Test Fails

Psychology

The evidence in widely published cigarette advertisements that tell how blindfolded celebrities selected the particular brand whose money bought the advertising space is called in question by exhaustive psychological tests carried out in Reed College, Portland, Oregon, by Louis Goodman, a graduate student. Instead of the hundred per cent. recognition claimed in the advertisements, the seasoned smoker-subjects were able to pick their favorite brand only once in every nine times that it was presented to them.

By pure chance, the smoker should be able to recognize his favorite brand in 17.6 per cent. of the attempts, but in the tests the rating made was only 11.6 per cent. Even when not blindfolded the testers could not tell what cigarettes they were smoking if they were not allowed to see the label.

The conclusions of the tests claim that smokers can not recognize brands on the basis of odor or taste, name brands correctly when deprived of visual clues, differentiate between two cigarettes, differentiate between strong and mild cigarettes, or tell the difference between straight Turkish and domestic tobaccos.

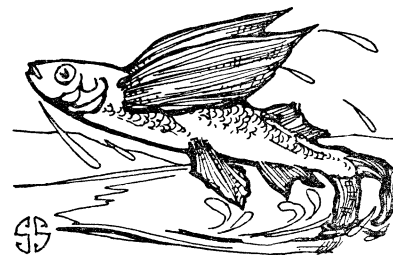
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France reported the lowest infant death rate in its history in 1927.

NATURE RAMBLINGS

By FRANK THONE

Natural History



Flying Fish

Trans-oceanic voyagers, and occasionally seaside vacationers as well, will have opportunities to see the fish that is said to have caused the familiar phrase, "Tell it to the Marines!"

The story is, that when Charles II first heard of flying fishes he was incredulous, but upon being assured of their actual existence by a captain of the Royal Marines, His Majesty declared that thereafter when he heard any incredible tale he would refer it for verification to these much-traveled sea soldiers.

The flight of a flying fish is, of course, not like the flight of a bird or a bat, but a volplane or glide, like the swoop of a flying squirrel. Only instead of diving downward like the flying squirrel, the flying fish dives upward. He drives himself rapidly through the water with his tail, which is the principal organ of propulsion in fish; then, breaking water like a trout leaping at a fly, he spreads out his wide, thin side fins and skims along through the air on them as far as the energy accumulated in the preliminary rush will carry him. It is really a kind of marine broad-jumping, assisted by sustaining planes.

Some flying fish shake and rustle their fins as they sail through the air, but whether these movements lengthen their flight is disputed by naturalists. There seems, however, to be no true wing-beat motion, such as that of birds.

There are a great many species of flying fish, some of them equipped with one pair of flying fins, some with two pairs. Many of these species are gracefully shaped and gorgeously colored. The true home of the flying fishes is in tropical waters all around the world, but some of them range northward and southward into warm temperate waters.

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