

The 1925 Marsh expedition to Darien including, it is hoped, geneticists, ethnologists and anthropologists, will have the task of solving this unique racial mystery.

Mr. Marsh intends to take the five brown Indians back to Darien with him, but he hopes to be able to keep the three White Indian children in this country and educate them in American schools.

MAGNETIC MACHINES SAVE COAL NOW LOST IN CLINKERS

Electro-magnets of great power are used in new types of fuel-saving machinery, to pick the clinkers out of the unburned coal. The first successful tests of these machines in this country are described by Rudolph Kudlich, of the Bureau of Mines, U. S. Department of the Interior.

The principle underlying the new type of clinker separator depends on two simple facts; first, that clinkers and coal do not fuse together, and second, that practically all clinkers contain a little iron and are therefore weakly magnetic. The new machines pass crushed furnace wastes under electro-magnetic drums, which lift out the magnetic clinker particles and permit the non-magnetic coal to pass on, to be returned to the bins.

Savings well worth figuring on may be effected by salvaging unburned coal from furnace wastes. One well known combustion engineer estimates that the average amount of combustible in the refuse from a large stoker fired central station boiler plant is about fifteen or twenty per cent. Assuming that the coal burned contains twelve per cent. of ash, and allowing for flue dust losses, approximately two per cent. of the original coal is thus carried out, unburned, in the ashes.

Most of the methods of coal salvage at present in operation involve the use of water, to float off the light particles of half-burned coal, while the heavier clinkers sink. Such systems, however, are claimed to be less efficient than magnetic separation.

The magnetic method has already been tested in Europe, where fuel costs present even more serious problems than they do in this country. Tests reported by a German firm showed recoveries up to eighty-seven per cent. of the combustible in the refuse.

RICKETS CURED BY ULTRA VIOLET LIGHT CAPTURED BY FOOD

The mystery of why rickets can be cured by so dissimilar treatments as administration of codliver oil and exposure to sunshine has been solved.

Cod liver oil and other substances curative of rickets are bottled sunshine.

When substances curative of rickets are exposed to the air or utilized in the body, they actually give off ultra-violet light, the same sort of radiation to which the sunlight and the radiations from mercury quartz lamps owe their effectiveness.

This is the discovery just announced from the Department of Pediatrics of Yale University by Prof. I. Newton Kugelmass and Dr. Irving McQuarrie. And