is a condition in which the sex of the individual is in doubt.

The condition is rare in twins. Only eight previous cases in twins have been reported in medical history, and of these six were either born dead or died in early

infancy. From their external appearances, Dr. Rhodes believes the twins he reports are male pseudohermaphrodites. When they are older, further examinations will be made to find their sex.

Science News Letter, November 13, 1943

RESOURCES

Critical Coal Shortage

Low temperatures may prevail in homes in many sections of the country this year due to the lack of sufficient fuels of all types.

➤ RESERVE COAL stockpiles are reported low in various sections and low temperatures may result in many homes this winter unless increased production and shipments meet the daily needs. Even the quota allowed to retailers by government officials, 90% of last year's supply, may not be available in certain communities.

The reason is a coal shortage which will probably grow worse as the activities incident to war continue to expand, unless production can be increased. For a substantial period the production has fallen below the level of national requirements.

The best proof of this statement rests in the fact that in the period from Jan. 1 to Sept. 1 of this year, consumers' stockpiles of bituminous coal were reduced from 85,889,000 tons to 75,292,000 tons. Production in that period lacked 10,597,000 tons of equalling requirements, and the difference had to be made up from reserves.

That is only half the story. During the same period last year stockpiles were increased by nearly 20,000,000 tons as protection against future requirements. This year, instead of building up reserves, production did not meet current needs and consumers were forced to burn stockpiles.

In September, 1942, it was estimated

by the Federal Solid Fuels Administrator that 600,000,000 tons would be needed for 1943. Consumption so far shows this estimate to be close to the mark. Production as of Oct. 1 was a little less than 445,000,000 tons. Even without strikes it would be a practical impossibility to reach the 600,000,000 goal now.

The anthracite situation is even worse than the bituminous coal situation. It was estimated at the beginning of the year that 65,000,000 tons would have to be mined to meet all requirements. This is an increase of 10% over the production of the previous year. Actual increased production to date is less than 1%.

Anthracite is the number one household fuel in the North Middle Atlantic States, and large quantities are used in New England although fuel oil was the most used fuel there in normal times. New England now is reported to be in a bad situation, with many communities whose local stockpiles are exhausted.

The price factor does not enter into the present coal situation to any considerable extent. Ceiling prices established by OPA permitted an increase of about 25c a ton for bituminous coal and 50c for anthracite to meet mining adjustments.

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AERONAUTICS

Air "Freight Trains"

Post-war planes, using glider pick-up service, will make safe, speedy and cheap delivery of cargo. This type of service is now out of the stunt class.

➤ IT COSTS less per pound to ship your wife by air from Washington to Mexico City than a pair of shoes, and the shoe package needs only a pair of legs to get it on and off the plane, while your wife demands attentive service, a comfortable seat, air conditioning, the latest magazines and meals.

Air "freight trains," employing glider pick-up service, to come after the war will change this cargo picture, Grover Loening, consultant on aircraft for the WPB, reported to the Institute of Aeronautical Sciences meeting in Washington. He emphasized the tremendous commercial aspects of the glider pick-up air train. Developments initiated by the late Richard Du Pont and use by the Army Air Forces have greatly accelerated the progress in this field. Though just beginning, this type of service is now out of the stunt class and into the practical, Mr. Loening stated.

Using the hypothetical example of an air trip between New York and Washington, Mr. Loening pointed out that a glider train carrying cargo designated for intermediate stops on the run, could unload and pick up new cargo without losing valuable time by stopping to land and could make the complete trip in 81 minutes with an average rate of speed of 168 miles per hour.

The same trip, using a present-type cargo plane without a trailer, would take 168 minutes with an average rate of speed of 82 miles per hour due to the frequent stops for loading and unloading. On the same trip by glider train, non-stop passengers bound for Washington would be placed in the tug, or powered, plane.

These air freight cars, Mr. Loening explained, will not be strung out in a single line behind the tug plane, but will be fanned out on different length cables to prevent any chance of collision. They will not be the clumsy, box-car shape that the word "freight car" brings to mind, but will be the ultimate in stream-lining to eliminate all surface drag.

It is generally assumed at this time that having more than three gliders in the train is impractical.

Advantages of such a system of glider pick-up air trains, as pointed out by Mr. Loening, will be the time saved in cargo handling; the lower freight cost for air cargo; the many points along a route served without stopping to land; the use of shorter runways already in existence as a glider needs less length to land; the lack of vibration in a glider carrier, which will permit the fast and safe shipping of perishables; less fire and crash risk as the gliders carry no engines, so if something should go wrong with one of three gliders, this glider could be automatically released and 75% of the load