the 25 sets for which the sex is known, 76 were boys and 49 girls.

Scientists do not consider that the original sex ratio is any different for multiple births than for single births, but that the vicissitudes of development are much more of a burden to members of a multiple birth, and girls are constitutionally better able to withstand the difficulties and survive birth.

The fact that the Dionne quintuplets have lived and grown under such very difficult circumstances may be due to the fact that they are all girls.

A Biological Accident

Human infants usually arrive singly because, in humans, nature ordinarily provides for the release from her storehouse of but one egg cell at a time. It is in this single cell that the human being has his origin.

Under unusual conditions, however, due to causes which are not completely understood, nature allows the release of two or three of these egg cells at a single time.

This trick of nature is not particularly rare. According to Dr. A. F. Guttmacher, Johns Hopkins University physician and scientist, it happens about once in every five monthly cycles, but it is relatively rare that both eggs develop into living creatures.

When they do, twins or triplets are born. But twins or triplets formed in this fashion are not especially like one another except as they share in the general tendency for members of one family to have resemblances. About 70 per cent. of all twins are of this dissimilar, or "fraternal" type.

The twins that are mistaken for one another, that are as alike as two peas in a pod, are formed in a different manner. These identical twins have their origin in but one single cell which begins to develop in the ordinary fashion.

Once in a great while, because of something which disturbs the normal course of development, the cell may separate into two entirely distinct parts, each of which develops into a complete and perfectly balanced human being.

The Dionne quintuplets are likely to have among their number both identical and fraternal twins, for although the chances are small that both these types of biological accidents would occur at the same birth, the chances are even smaller that five separate egg cells would be released from nature's storehouse at the same time and that every one of these should be fertilized and come to birth. The chances are even more remote that a single cell would divide into five parts, for the cell division does not usually produce odd numbers.

Science News Letter, September 1, 1934

GEOLOGY

Over-Production of Crude Oil May Exhaust Supply

FACED with a possible future shortage of one of Uncle Sam's most valuable natural resources, engineers and officials in the oil industry are advising conservation of U. S. oil deposits.

The known, drill-tested reserves of crude oil in the country amount to about 12,000,000,000 barrels. Divide this sum by the yearly consumption of 800,000,000 barrels and the answer is that in about 15 years, unless conservation is exercised, we will run short of one of our greatest economic assets.

At the Fourth Annual Economic Conference for Engineers, held at Johnsonburg, N. J., Charles B. Ames, chairman of the Texas Company's Board, discussed the effects of present administration policies on a petroleum shortage, which will face the nation if steps already taken are not modified.

"A plan should be developed for the effective conservation of our crude oil supply. This can be accomplished through the medium of a compact between the Federal Government and the principal oil-producing states."

One of the greatest difficulties in the conservation program has been securing cooperation among these states. The NRA afforded the first opportunity for a far-reaching national program.

Although the possibility of control forced the price of crude oil up from 25 cents per barrel in the spring of 1933 to $1.00 in September, 1933, it has not prevented over-production. Since the Oil Code went into effect last September, production of petroleum has exceeded the estimated requirements by about 40,000,000 barrels.

Science News Letter, September 1, 1934

METEOROLOGY

NATURE RAMBLINGS by Frank Thone

Drought Records

FROM THE excited discussions in the press and by the public at large, it might be thought that drought in the United States was invented in the summer of 1934. This is far from being the case. Although the present dry period is admittedly the costliest in crop and livestock losses that the country has ever seen, there are plenty of dry spots on the map that have been even drier.

Some of them hold records for drought that reach back more than a hundred years, a study of the World Weather Records of the Smithsonian Institution discloses.

In Washington, D. C., precipitation records have been kept for 110 years, since 1824. The Capital's champion dry summer occurred in 1826, with a rainfall of only 18.79 inches.

The longest American weather record is that for Charleston, S. C., which has been kept, with a few interruptions, for 196 years. The old Southern city's driest year was 1850, with 23.69 inches of rain; its wettest was 1765, with 68.76 inches.

Records for the Midwest and Northwest of course do not extend so far back; Weather Bureau stations were established in those regions during the '70's, for the most part. But even at that, they have been able to establish some pretty stiff drought marks for 1934 to shoot at. Cheyenne's driest year, 1876, shows only 5.04 inches of rainfall. Helena, Mont., established a low-precipitation record in 1889, with 6.71 inches. Bismarck, N. D., had only 11.03 inches of rain in the same year. Omaha's all-time record for drought was set as recently as 1910, with 15.49 inches, only about half its "normal" rainfall.

Science News Letter, September 1, 1934