Less Anemia

FEWER deaths from pernicious anemia have been reported since the treatment with liver or liver extract has become countrywide, statisticians of the Metropolitan Life Insurance Co. have just found in a survey of vital statistics. This statistical proof bears out the impression of doctors and pathologists throughout the country.

It has been claimed that pathologists in medical schools are hampered in their teaching because they cannot find enough fresh material to show the medical students how this disease affects the various organs and parts of the body. Since the introduction of the treatment by Drs. George R. Minot and William P. Murphy of the Harvard Medical School, the deaths from the disease, and even cases of it, have become comparatively rare in the hospitals.

"Whether the use of liver or liver extracts will result in a permanent lowering of the death rate or only in a postponement of death from the disease remains to be seen from the data of individual case experience for subsequent years," the statisticians said.

Since 1926, when the liver treatment was first introduced, the mortality for whites has been reduced by half between the ages of 55 and 74 years, when formerly the heaviest mortality from this disease occurred.

Health
Science News-Letter, July 19, 1930

Friendly Insects

THE widely heralded war between insects and the human race is only half a picture and therefore a false picture. Insects are also great benefactors to man and all the animals that contribute to his well-being, and in justice they should be recognized as such.

So declared Dr. Frank Lutz, entomologist of the American Museum of Natural History, in a Science Service radio talk given over the Columbia Broadcasting System.

Calling attention to the impossibility of having our present supply of fruit without insect aid, Dr. Lutz proposed a hypothetical question:

"Suppose we had never had any apples, pears, plums, peaches, oranges, strawberries, or anything of that sort. Suppose, however, that a group of strangers brought us delicious samples of a great variety of such fruits and told us that they, the strangers, could make it possible for us to grow all of these things. Suppose that, in return for this possibility which only they could grant, they asked that a twenty per cent. commission be paid to their relatives. Does anyone think that this would be an unfair proposition? I am sure that we would be glad to accept the bargain and then, later, we would try very hard to beat the relatives out of their twenty per cent."

However, distributing pollen is only a part of the work insects do for us. The very soil plants grow in, even plants not dependent on insects for pollenation, is in part a gift of the insects, Dr. Lutz continued. He said:

"Darwin rightly praised the soil-making activities of earthworms and became their most effective press agent. Risking the false impression that I think the value of earthworms is overrated, I would like to point out that ground burrowing insects are more widely—in fact, universally—distributed than are earthworms, that they are more numerous in any given locality and that they are much more active. Furthermore—and this is a generally overlooked fact—an additional reason for their being more effective soilmakers than earthworms is that they carry beneath the surface not only decayed leaves but rich nitrogenous plant-food such as manure and the dead bodies of animals.

"Time will not permit even a sketchy continuation of this line of thought but perhaps you are already about to ask how land plants of any kind ever existed without insects. Others have asked that question and a part of the answer is that geological history shows that there was no extensive growth of land plants and no flowering plants at all before insects became well established on earth."

Entomology
Science News-Letter, July 19, 1930

Man of Gardar

WHAT manner of man was the Man of Gardar?

Was he a surviving neanderthaloid type, thousands of years out of his time in the Middle Ages? Was he a freak Eskimo, living with the dwindling colony of Norsemen on the unfriendly coast of Greenland in the twelfth or thirteenth century? Or was he a degeneration type, arising from the inbreeding of a malnourished group of white men cut off from the rest of the world?

These questions have been roused by the recent discovery in the medieval Christian cemetery at Gardar, southwest Greenland, of a most extraordinary skull, that has many of the characteristics of the low-browed, heavy-jawed Neanderthal race that inhabited mainland Europe scores of millenia ago. The find was made by Prof. F. C. C. Hansen of the University of Copenhagen, and is discussed in the scientific journal *Nature* by Sir Arthur Keith, noted anthropologist.

Sir Arthur is inclined to look upon the strange skull as the result of a disorder of growth, somewhat like the fairly common and distressing type of giantism known as acromegaly. This disease is due to a glandular failure, and frequently results, says Sir Arthur, in the assumption, "in a bizarre form, of all the characteristics of the skulls of ancient fossil man—particularly Neanderthal and Rhodesian characters.

"*Homo gardarensis* must have been the subject of a disorder of growth—the kind of disorder which causes giantism in man, but whereas in most giants growth soon becomes irregular, in *Homo gardarensis* it remained regular."

Paleontology
Science News-Letter, July 19, 1930

IN VARIOUS S

Fighting Wasps

WASPS have a strong racial feeling. They will welcome strangers belonging to their own species, even though they come from nests many miles away. But if a strange wasp of a different species alights on the nest it means instant battle.

This in outline gives the results of experiments on wasps in a number of nests which Phil Rau, of Kirkwood, Mo., hung up in his third-floor laboratory and studied in greater intimacy than most of us would want to bestow on the slim-waisted "hot-tails."

Mr. Rau's collection contained three species of the genus *Polistes*. He found that in general if an insect of a given species were transferred to a nest of the same species it would either be welcomed by a committee of the "home folks," or at the very least be let tolerantly alone, to make itself at home if it chose. Sometimes a stranger wasp would become a permanent member of its host colony.

A wounded wasp introduced into a strange colony of its own species would frequently receive apparently solicitous attention from its sister in-

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sects. They would lick its injuries and massage its body and wings.

As an extreme case, Mr. Rau pinned to one nest a dead wasp of the "right" species which had been kept for several years in a museum case in an atmosphere saturated with creosote vapor. Most of the wasps paid no attention to the mummy. A few made mildly hostile gestures and then became indifferent. But one determined female apparently had opinions of her own about the strange-smelling intruder, for she attacked it furiously and was not content until she had bitten off both its wings. Then she retired and treated herself to a most elaborate and lengthy toilet.

When a wasp was placed in a colony of a different species, there was no friendly welcome nor even an indifferent toleration. Everybody was up in arms at once, and the stranger usually got very short shrift unless she were lucky enough to escape. The intruder would instantly become the center of a mass of struggling, biting, sting-thrusting insects.

Their hostility was just as great against the dead body of an alien as it was against a living insect. The same mummified, creosote-flavored wasp that roused the antagonism of only a single individual in a nest of its own species produced a general riot when it was pinned on the nest of either of the two other species.

Entomology
Science News-Letter, July 19, 1930

Blindfold Ball

THROWING a ball at a goal with a blindfold bandage over your eyes is no longer in the class of childish party games like pinning the tail on the donkey. Athletes at the University of Illinois have been set to practising this very stunt of tossing a basket ball at a basket, blindfold, with the practical and scientifically sound purpose of learning to "feel" the correct shot.

The blindfold test was given to nine members of the freshman varsity squad by Prof. Coleman R. Griffith, psychologist and director of athletic research at the university. Prof. Griffith is a pioneer in the field of athletic psychology. From this experiment he has concluded that any basket ball player must develop the sense of "feel" before he can acquire any skill at sending the ball just so far and no farther.

Prof. Griffith observed that missed shots were more frequently caused by errors in distance than errors in direction. Ordinary practice will not tend to correct the former and more serious type of inaccuracy, he concluded.

The tests showed that an incorrect position at the foul line will result in the player shooting either to the right or left. This type of error is easily corrected by a slight change in the throwing stance so that neither arm dominates the direction of the shot. The distance errors were more frequent after a two-hour workout.

In commenting on this Prof. Griffith said, "The results are in line with ordinary expectations. The more difficult and complicated skills are the first to disintegrate under the effects of fatigue."

Psychology
Science News-Letter, July 19, 1930

Replacing Cotton

RAYON and other synthetic cellulose fabrics will soon be underselling cotton goods as they are now underselling silk. So prophesies Prof. Charles E. Mullin, head of the division of textile chemistry at Clemson College. One company, he states, has already announced that it can produce viscose yarn at a lower price than that of medium or fine cotton yarns of the same size.

"While this economic development in the field of yarns is of considerable interest to the synthetic fiber manufacturers, due to the fact that it apparently widens the sales and manufacturing possibilities enormously on the basis of price alone, it is not nearly as good news for the cotton growers and spinners," Prof. Mullin comments. "Already in China, Japan and some other countries the manufacturers of the cheaper real silk materials are complaining of the inroads of the synthetic yarn fabrics on their sales, and as soon as the price of the synthetic yarns drops to near that of the cotton yarns of the same size, the same will be true in the case of cotton goods."

Synthetic fibers are competing with silk not only in price but also in fineness, Prof. Mullin has found. It is now possible to produce filaments that are two and one-half times finer than those of true silk. These are being made on a commercial scale both in America and abroad. It requires more than 4,225 miles of one of these filaments to weigh a pound.

Chemical Engineering
Science News-Letter, July 19, 1930

Saved from Modernism

VERULAM, metropolis of the early Britons in the days of Imperial Roman conquest, is to be safeguarded permanently against suburban real estate developments and other archaeological calamities. Officials of the modern city of St. Albans, which stands close by the old Romano-British city, have bought almost one-half of the famous site. The land will be reserved as a public park, and the remains of buried walls and buildings will be sought by scientific excavations.

Verulam was an important capital of a powerful tribe in southern Britain when London, nearby, appears to have been nothing more than a cross-roads trading post. The Romans conferred upon Verulam the highest civic status possible, calling it a municipality.

Ruins of a theater were excavated at Verulam in 1847, and so far as is known this was the only town in Britain that acquired a Roman theater. A portion of the forum was excavated in 1898, but official buildings which probably stood near the market center are yet to be unearthed. The city appears to have continued in existence for four or five centuries after the Roman conquest.

Excavations are to be started this summer. Because of Verulam's special importance, there are hopes that the site will add materially to knowledge of city life in early Britain.

Archæology
Science News-Letter, July 19, 1930

Avocados from Hawaii

WITHIN another year, export of alligator pears from Hawaii is expected. The latest developments in fighting the fruit fly menace on avocados there will soon result in the lifting of the present prohibition against exportation of the product.

Dr. E. A. Back, of the U. S. Department of Agriculture, was the first to try refrigeration on fruits affected by the fruit fly in 1916 with fair results. He predicted that with this treatment for about three months, the pears will no longer be carriers of living fruit fly larvae.

Dr. Back also expressed the belief that there is great hope for the hard-shelled variety grown there because of the resistance against the puncturing apparatus of the fruit fly.

Agriculture
Science News-Letter, July 19, 1930