ZOOLOGY

NATURE RAMBLINGS by Frank Thone

Unlisted Casualties

UNKNOWN, unnoticed casualties of the new war that is tearing Europe to bits are many, especially among the wild creatures that lived in the forest and fields suddenly turned into areas of savage, blasting battle. Until the fighting ceases we shall not know what has happened to them; perhaps we shall never be able to find out.

Among the animals now utterly lost amid the dust and smoke of new battles is one species that was almost exterminated during the first World War. The present conflict may mop up the few survivors. This is the wisent, or European bison, close cousin of the shaggy animals that were the Thundering Herd of our own western plains until half a century ago.

Before the first World War there were about 800 or 900 of these animals in the forest of Bialowies, in Poland. In the time of starvation and anarchy that followed, practically all these animals were killed for food by peasants and straggling soldiers. When the Polish Republic became a stabilized nation and took charge of the area, there were only a handful of wisent left. These were put in a fenced range and carefully protected.

Now, war has swept through the Bialowies woods twice in two years. The forest was in the Soviet-occupied part of Poland when that country was partitioned between the Reich and the USSR in the autumn of 1939. The Soviet government promptly set up a preserve, endeavoring to carry on what the Poles had started. But in the past few weeks they in turn have been driven out by the crushing onrush of the Panzer corps. It is too much to hope that the few surviving wisent escaped.

There used to be an even larger herd in the Caucasus, before the first World War. An expedition of Soviet scientists went into that area about ten years ago. They did not find a single living wisent.

There were also scattered small groups, mainly on large estates and in zoological gardens. Their fate is unknown. Best chances for survival would seem to be for the wisent on the estate of the Duke of Bedford, in England, and for a small group in Sweden. The latter, however, are said to have been hybridized with American bison, so that as representatives of the original species they hardly count.

So far as judgment is possible at present, one is forced to the melancholy conclusion that here is another once-great animal whose long twilight is passing into the night of final extinction.

Science News Letter, October 11, 1941

ANTHROPOLOGY

Book on Race Problem Refutes Nazi Doctrines

Book Sponsored By Catholic University of America Is, However, Non-Sectarian Work by Many Authors

NAZI dogmas about race are treated rather roughly in a new book, *Scientific Aspects of the Race Problem,* sponsored by the Catholic University of America. (*Reviewed SNL, this issue*) Although neither Nazism nor Fascism are anywhere mentioned by name in the book, and the word "Aryan" does not occur in its pages, no doubt is left about its purpose.

The aim, indeed, is openly avowed in the preface, written by the University's rector, Bishop Joseph M. Corrigan, who states: "Truth will never be defeated, though it may be obscured for a time. Nevertheless, the only remedy we can hope to apply against the madness which seems to have befallen so large a part of Western civilization is to state clearly the objective truth. Truth indeed will but seldom convert those who have fallen the prey to fanatic creeds; but it may, and it alone may, prevent the spreading of the disastrous contagion. It is timely and necessary, therefore, to treat the question of race in a cool, objective, and truly scientific manner."

Since the Catholic University of America is the property of all the bishops of the United States, rather than of a single religious order or society, a publication of this kind must have been considered very carefully before being undertaken, and it may be assumed that it has the consent and approval of the very highest authority in the Church.

The book, however, is specifically not a sectarian work. Of the six authors who contributed chapters, four are non-Catholics, and neither they nor the two Catholic authors make the slightest mention of Catholic or any other religious doctrines. The discussion is thoroughly and factually scientific throughout.

The initial chapter, by Dr. H. S. Jennings of the University of California at Los Angeles, is a condensed but complete statement of what is known at present about the facts of heredity and the biological processes underlying them. There follows a closely related chapter, by Prof. Charles A. Berger, S.J., of Fordham University, on human psychological inheritance. Neither Dr. Jennings nor Prof. Berger is willing to make any sweeping statements about heredity in human beings; existing facts simply do not justify such declarations.

Dom Thomas Verner Moore, O.S.B., professor of psychology at the Catholic University, contributes a third chapter, in which he discusses how far animal and human intelligence march together and where they part company. There is evidence, which he brings out, that animals perceive and "reason" somewhat as man does where concrete material things are concerned. But confronted with the simplest abstraction, even dogs and apes apparently are unable to do anything with it. From there on, man walks alone.

Dr. Ales Hrdlicka, veteran anthropologist of the U. S. National Museum, discusses the physical realities of races in his chapter. His tabulations of existing and ancient races show that most peoples of the world are and have been very mixed. Incidentally, Dr. Hrdlicka considers Nordic man to be descended from the Mediterranean stock—an idea that

would hardly please Nazi race "experts".

Prof. Robert H. Lowie of the University of California and Prof. Otto Klineberg of Columbia University, who discuss respectively the achievements of human races and mental testing of racial and national groups, give no comfort to believers in racial superiorities. Their findings, and those of co-workers whom they review, load the scales rather heavily on the side of environmental influences.

Science News Letter, October 11, 1941

PSYCHOLOGY

Army Seeks New Yardstick To Measure Flyers

THE ARMY is searching for a new kind of yardstick. With it they want to measure the dauntless spirit, keen perception and sure-fire judgment that make the fighting flyer a success.

Three new psychological research centers are being established at Army Air Corps fields where intensive work will be done to find rapid, accurate ways of picking men who will make good pilots, good leaders, good observers or good bombardiers.

Taking up the threads of research where pioneers in this field dropped them at the end of the first World War, psychologists will now seek out new devices and tricks of technique fitted to selection and training of men for modern blitzkrieg warfare in the stratosphere and dive-bombing to the earth.

Psychologists will work closely with physiologists and medical officers in this research because it is recognized how closely interrelated are the problems of mind and body.

The Army has picked to head these psychological research centers, under the medical division of the office of the Chief of Air Corps, men who are recognized as leaders in psychology. Among them are: Dr. John C. Flanagan, of the Cooperative Test Service of the American Council on Education, who will direct the project from Washington; Prof. Robert T. Rock, of Fordham University, who will be at Kelly Field, Texas; Prof. Laurance F. Shaffer, of Carnegie Institute of Technology, at Maxwell Field, Ala.; and Prof. Arthur W. Melton, of the University of Missouri, probably at Santa Ana, Calif. A psychological staff will also work at the School of Aviation Medicine, in the medical research laboratory.

Science News Letter, October 11, 1941

Old automobiles are being converted into *farm tractors* in England.

MINERALOGY

New Mineral Discovered With Smallest Crystals

So Small that 1,000 Laid End to End Would Measure Only an Inch, Crystals Have Been Successfully Measured

MINERAL crystals so small that 1000 of them laid end to end would reach only an inch, have been successfully measured by Samuel G. Gordon, mineralogist at the Academy of Natural Sciences of Philadelphia.

These crystals are of a new mineral, just discovered in a mine in Argentina, and flown air mail to the Academy's expert for description and naming. They are the smallest mineral crystals ever measured, the previous smallest being twice as large.

Called sarmientite by Mr. Gordon and Dr. Victorio Angelelli, of the Argentina department of mines and geology, co-author of the paper in which it is described, the new mineral is found in fair-sized nodules of great purity, of a pale yellow-orange color, in iron sulfate deposits of the Santa Elena mine.

This mine, high in the mountains of the department of Barreal, lies between San Juan and Calingasta, at an elevation of around 5,000 feet. It has been worked only a short time, yielding alums for use in water purification.

Already a number of rare minerals have been found there, some so rare that they had previously been found only at the original localities, mostly in Europe. Practically nothing was known about these rarities until they were rediscovered in the Argentine mine, and restudied by Mr. Gordon.

The new mineral was picked out of a mass of rare minerals by members of the department of mines and geology of Argentina. The pale yellow-orange nodules were unlike anything seen before in the mine and excited the interest of Dr. Angelelli, who believed they might be a new mineral. A sample was dispatched at once to the Academy, because of its high rank in the field of micro-mineralogy.

Mr. Gordon studied the nodules under a high power microscope, and could see that they were made up of exceedingly minute prisms, the largest of which were only a thousandth of an inch long. One of the largest, for the smallest were only a twelfth as large, he mounted on the point of a pin, carefully orienting it under the microscope. It was transferred to a two-circle goniometer, a complicated instrument for determining the angles of minute crystals. Light signals could be seen as the various faces of the crystal were turned and the angles of the faces were measured. He was then able to draw a figure of the crystal and classify it as of the monoclinic system. Chemical analysis disclosed that it was a hydrous iron arsenate-sulfate.

The new mineral was named for Domingo Faustino Sarmiento, a great Argentinian educator and statesman, who was born in 1811 and died in 1888. Sarmiento held the offices of minister