THE New York Zoological Park has received during the past week a consignment of animals from Hagenbeck's agency at Hamburg. The collection includes a pair of giraffes, valued at \$15,000 and some twenty-five other animals.

A PRELIMINARY statement showing the coal production of the United States, prepared by Mr. Edward W. Parker, statistician, has just been issued by the United States Geological Survey. The statistics, though subject to slight revision and correction because of a few incomplete returns, are sufficiently correct to enable comparisons to be made between the production of 1902 and that of former years. For the first time in the history of the United States the production of coal has reached a total of over 300,000,000 short tons, showing an actual output of 300,930,659 tons of 2000 pounds, valued at \$373,133,843. Of this total, the output of anthracite coal amounted to 36.865.710 long tons (equivalent to 41,289,595 short tons), which, as compared with production of 60,242,-560 long tons in 1901, shows a decrease of 23,376,850 long tons, or almost 40 per cent. This decrease, as is well known, was due entirely to the suspension of operations by the strike in the anthracite region from May 10 to October 23, a little over five months. Had it not been for the strike, which practically stopped production in the anthracite region for this length of time, the output for the year would have probably attained a total of over 65,000,000 long tons. The value at the mines of the product in 1902 amounted to \$81,016,937, as against \$112,504,020 in 1901, a loss of about 27 per cent. The average value of the marketed coal sold during the year at the mines was \$2.50 per long ton, the value in 1901 having been \$2.05. The comparatively small amount of anthracite which was mined during the strike, which brought such exorbitant prices, did not have the effect on the total production that might have been expected.

In his report to the United States Geological Survey on the production of petroleum in 1902, now in press, Mr. F. H. Oliphant gives the following table showing approxi-

mately the production of crude petroleum in all the known countries of the world, together with the percentages of each for 1902, in terms of United States barrels. A small estimated quantity is placed under the head of 'all other countries,' included in which is the primitive production in several of the South American States, and in Algeria, Persia, the Philippines and China, from which no returns could be secured. The total increase in 1902 amounted to almost 7 per cent. as compared with 1901, and to almost 20 per cent, as compared with 1900. The most conspicuous items in the list are the increase in the production of the United States and the decrease in the production of Russia, the result being that the output of these two countries reached nearly the same figures in 1902. In 1902 the United States and Russia produced 91.08 per cent. of the total output. as compared with 93.22 per cent. in 1901 and with 94.11 per cent. in 1900. Of the remaining 8.92 per cent. produced by all other countries, Sumatra, Java, Borneo, Galicia and Roumania, which furnished only 4.65 per cent. in 1901, furnished 6.82 per cent. in 1902, leaving 2.10 per cent. of the total as the output of the other producing countries.

Quantity (Barrels).	Percentage of Total.
80,894,590	45,64
	.29
	.03
	45.44
	2.35
	3.31
	1.16
	.89
	.67
353,675	.20
12,000 )	
26,000 }	.02
177,231,900	100.00
	(Barrels).  80,894,590 520,000 60,000 80,540,045 4,142,160 5,860,000 2,059,930 1,570,500 1,193,000 353,675 12,000 26,000 }

UNIVERSITY AND EDUCATIONAL NEWS.

L. H. Severance, of Cleveland, has agreed to give \$100,000 toward the fund of \$1,000,000 which it is proposed to raise as an endowment for Wooster University.

The visiting committee having in charge the raising of money to build Emerson Hall for the Department of Philosophy at Harvard University has turned over to the treasurer of Harvard College \$154,000, \$4,000 more than it was originally intended to collect. The committee hopes to raise the total amount to \$200,000 before proceeding to erect the building.

The last session of the University of Pennsylvania appropriated \$25,000 to equip a laboratory for X-ray research and Finsen's light apparatus at the Hospital of the University of Pennsylvania. Dr. Henry K. Pancoast has charge of the work.

THE State University of Iowa, at Iowa City, has received a rather unusual but useful gift from Mr. and Mrs. Euclid Sanders, both graduates of the institution. The gift comprises a grant of the Terrill mill dam on the Iowa River, a mile above the university campus, with the water power rights pertaining thereto, together with the deed of a strip of land along the east bank of the river. The dam will yield upwards of five hundred horse power. A water power plant will be erected, in connection with which a hydraulic laboratory will be equipped. It is also proposed to construct a reservoir on a neighboring hilltop in order to secure a considerable head of water for experimental purposes. A portion of the power developed will be used for the generation of electricity to be used in lighting the university buildings and in driving machinery of the various shops and laboratories. At least one wheel berth will be reserved for the conduct of experiments with various forms of water motors.

Owing to the death of Professor Wilbur C. Knight, the position of professor of geology in the University of Wyoming is at present vacant and probably will not be filled for some months. While the salary is not large the advantages are great, for not more than ten hours a week of class work are required and the opportunities for research are varied. The university possesses the most complete collection of jurassic fossils in the United States, except Yale University, and a large part of this material has never been studied or described. Beside this the stratigraphy and physiography of the state remain to be studied as well as the petrography, which has already

yielded the Leucite Hills and Yellowstone Park.

DR. FRANCIS LINDLEY PATTON, formerly president of Princeton University, was installed as president of Princeton Theological Seminary on the 15th inst.

Professor J. E. Todd, owing to dissatisfaction with the administration of the university, has resigned his position as professor of geology and mineralogy in the University of South Dakota, which he has held for over eleven years. He consequently also ceases to be state geologist.

Dr. Arthur W. Smith has been appointed professor of physics at the University of Michigan.

Roy Titus Wells, Ph.D. (Clark), has been appointed assistant professor in charge of electrical engineering in the newly organized School of Applied Science of the State University of Iowa, at Iowa City. A new electrical laboratory is now being equipped under his direction.

MR. THOMAS T. REED, E.M. (Columbia), has recently been advanced to the position of associate professor of mining and metallurgy in the University of Wyoming, preparatory to the creation of a separate department of mining and metallurgy.

Mr. Robert E. Snodgrass, formerly assistant professor of zoology and embryology in the Washington State Agricultural College, has been appointed instructor in entomology in Stanford University.

Two important professorships are about to be filled at Cambridge University, that of physiology vacant by the resignation of Professor Foster and that of mechanism and applied mechanics vacant by the resignation of Professor Ewing.

Owing to the appointment of Dr. Martin to the directorship of the Lister Institute, the chair of physiology is vacant at the University of Melbourne.

Mr. R. C. Punnett, of Gonville and Caius College, Cambridge, has been appointed demonstrator of comparative anatomy in the university.