AT Stanford University, Dr. Lewis M. Terman has been appointed head of the department of psychology to succeed Professor Frank Angell, who retired at the end of the academic year 1921-1922. Other additions to the department include Dr. W. R. Miles, professor of psychology, and Dr. Calvin P. Stone, assistant professor.

PROFESSOR J. J. THORNBER, director of the Arizona Agricultural Experiment Station, has in addition received appointment as dean of the College of Agriculture of the University of Arizona, succeeding Dean D. W. Working.

MR. CHARLES W. T. PENLAND, A.M., Harvard, has been appointed instructor in biology in Colorado College for the ensuing year. Mr. H. R. Remmers, A.M., Iowa, has been appointed instructor in psychology.

MR. R. A. BRINK, who has for the past two years been at the Bussey Institution of Harvard University, has been appointed assistant professor of genetics at the University of Wisconsin. He succeeds in this position Dr. E. W. Lindstrom, who goes about September 1 to the Iowa State College at Ames as professor of genetics, where he will organize a new department.

DISCUSSION AND CORRESPONDENCE

FILTERED AIR

IN SCIENCE of June 2, 1922, in mentioning the work of the Committee for the Investigation of Atmospheric Pollution, reference was made to the work of Dr. Owens on the amount of dust found in expired air. It has been taken for granted, I think, by many medical men that in passing through the nasal and buccal passages efficient filtering of the air took place; and that all dust particles were deposited on moist membranes and automatically removed by secretion flow. Dr. Owens' experiments seem to prove that in ordinary breathing the expired air still contained as much as 70 per cent. of the suspended impurities which entered during inspiration. So that only about 30 per cent. of the impurities in air are removed in transit through respiratory passages.

Dr. Chase S. Osborn, formerly governor of Michigan and one who had much to do with mines, referring to the above mentioned insufficient filtering, suggests that there may be something in the fact that the influx of air has not the velocity and current strength of the efflux, and states that the finding of Dr. Owens that air is not purified in its passage through the body appears to be proved without doubt by sillicosis in the Transvaal mines. He says:

> It takes very little time comparatively for a miner's lungs to fill up. He is then subject to all sorts of pulmonary diseases. Dr. Gorgas was summoned to see if he could offer anything to prevent or cure. Even when the men wear masks these do not entirely avail, as often the men are in close places and will not wear the masks.

Good water, sterilized milk and insect screens have aided materially in reducing disease. May we hope to add to the list filtered air? There seems to be no doubt but that the use of a mouth mask was helpful in combatting the spread of influenza.

ALEXANDER MCADIE

THE "PROCESSING" OF STRAW

IN a recent number of SCIENCE, Professor Harold Hibbert calls attention to the work done in Germany in converting straw into a feed of greater value by boiling it with soda and suggests that American farmers may convert a waste product into "a profitable and palatable cattle food of high nutritive value" by following the German example. Professor Hibbert has apparently overlooked the fact that this feed is extremely low in proteins. This fact was mentioned by Lorenz Hiltner in his pamphlet in 1917-18 and is recognized as being a point against "processed" straw as a feed. Various methods have been tried by the Germans to increase the protein content, some of which are mentioned by Hiltner.

The Office of Forage Crops has been interested in the development of this German work but has not been convinced of the value of the process for the American farmer. While it is not possible to make accurate estimates of the expense involved it is quite evident that the labor item would be considerable. The farmer would have to set up a plant however simple

whether he used the cold process with NaOH or the boiling process with soda. Such a plant would necessarily be of considerable size since straw is light and considerable quantities of liquid (eight times the weight of the straw) must be used. Besides the treatment, the processed straw must be washed to remove the alkali. All of this involves labor and increases the cost of the process. Besides it seems probable that in America it will always be possible to grow corn or sorghum for feed much more cheaply than to process straw even if the latter were wholly a waste material, which is not the case.

Without doubt the attention of experiment stations should be and probably has been called to this process but it seems unwise even to suggest it to the average farmer.

A. J. PIETERS

OFFICE OF FORAGE CROP INVESTIGATIONS,
U. S. DEPARTMENT OF AGRICULTURE

DOES THE BIBLE TEACH EVOLUTION?

THE creation of man according to the story in Genesis is placed by chronologists at about 4004 B.C. The acceptance of this date or indeed of any variation from it that has been suggested carries the imperative implication that all existing types of man—white, yellow, red, brown and black—Englishman, Japanese, Malay and Negrito—have all descended from Adam and Eve. It matters not what anthropological characters may be assumed for Adam and Eve, the diversity of their supposed progeny illustrates what the biologist means by evolution. The Biblical story with its logical implications stamps every believer in it as an evolutionist. However, no serious scientific man will admit for a moment that human evolution has proceeded as rapidly as the story in Genesis necessarily supports. Viewed from the evolutionist's standpoint, the theory involved in the Biblical story makes Darwin's ideas seem exceedingly conservative. Really Mr. Bryan ought to attack Darwin as a hide-bound reactionary whose notions regarding the slow rate of modification in species seriously challenges the truth of evolution as taught by the Bible.

CHARLES V. PIPER

SCIENTIFIC BOOKS

A History of the Whale Fisheries, from the Basque Fisheries of the Tenth Century to the Hunting of the Finner Whale at the Present Date. By J. T. Jenkins, D.Sc., Ph.D. London, H. F. and G. Witherby, 326 High Holborn, W. C., 1921. 336 pages, with reproductions from photographs and old engravings.

In the preface to this book, the author tells us that no attempt has hitherto been made to give within a brief compass a detailed history of the whale fisheries: to the best of our knowledge and belief, this statement is in the main correct and the volume under consideration may be looked upon as an effort to remedy this lack of information. Parts of the story have, it is true, been told, and told very well, particularly that relating to the United States, and these Mr. Jenkins has passed over somewhat lightly, devoting much time and care to bringing together and making available for the reader who knows only English the story of the early days of the fishery and especially the important part played by the Dutch who, having practically dispossessed the English, for more than a century successfully prosecuted the chase of the whale about Spitzbergen or, as it was constantly called, Greenland. At the height of this fishery, the decade from 1680-89, nearly 2,000 vessels sailed to Spitzbergen—1,966, to be exact—and the catch of whales was 9,487, but from that time, with certain spurts, the industry gradually declined, coming to an end about 1800.

Mr. Jenkins has been at great pains to give us the details of this whaling, the size of the vessels—often much larger than the average American whaler of the fifties—their crews, equipment, even provisions and the manner of capture and trying out. All of this is interesting and important, to most of us it is new, and for this information we are most grateful. In one detailed list of equipment is noted "150 hogsheads of cidar and four tunnes of wines, eight kintals of bacon and six hogsheads of beefe," proportions that might have met with the approval of Falstaff.

One point is surprising—the comparatively