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