> Fair speech is more rare than the emerald that is found by slave-maidens on the pebbles.

Since the actual parchment is said to date from 2500 B.C., and since Ptah-hotep lived about 3500 B.C., this gives us a written mention of the emerald and its occurrence as a placer mineral on a document 4,500 years old, and shows that it was prized as a gem about 5,500 years ago, perhaps 2,500 years before the "Iliad" and "Odyssey" had come into existence, and over 2,300 years before the traditional date of the siege of Troy.

Whether the word here translated emerald is strictly the emerald as we define it I do not know. At any rate such a translation harmonizes with the usual implication that Egypt is the place of earliest recognition of the stone. The Encyclopedia Britannica, for instance, says:

> Ancients appear to have obtained the emerald from upper Egypt, where it is said to have been worked as early as 1650 B.C.

The document under discussion shows that it was searched for and prized almost 2,000 years before this.

The same publication that contains the "Instruction of Ptah-hotep" contains a short "Instruction of Amenemhê'et" who ruled in Egypt about 2778–2748 B.C. He remarks:

> I have made me an house adorned with gold, its ceilings with lapis lazuli. . . .

This document in the part quoted is said not to be so reliable as the preceding one.

Since a geologist would only by accident have this book called to his attention, it seems worth while to quote such ancient—so far as I know the most ancient—references to these minerals.

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METHYL AND ETHYL ALCOHOL

To the Editor of Science: When the Mapp prohibition law, which went into effect in Virginia last November, was before the state legislature we communicated with our representative, asking that the interests of the colleges be safeguarded in respect to the use of alcohol for scientific purposes, but the law as enacted ignores biological laboratories entirely. We are therefore compelled to seek a substitute for ethyl alcohol, at least until the law can be amended. Hence the following queries:

1. Can methyl alcohol be substituted generally in processes of dehydration without modifying the methods otherwise or without prejudice to the staining or keeping qualities of the preparations?
2. Can methyl alcohol be generally substituted in the formulas for stains, etc.?
3. Are there any special cases in which this substitution may not be made?
4. What kind of methyl alcohol should be used?

The manuals on histological technique give little information on this question, but it may be that someone in "bone dry" territory has found a substitute for ethyl alcohol. If so, there are a number of readers of Science who would be grateful to hear of it.

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SCIENTIFIC BOOKS

Institut de France. Académie des Sciences, Annuaire pour 1917, Paris, Gauthier-Villars et Cie. sm. 8vo (17 × 11 × 1.3 centimeters). 315 pp.

The Yearbook of the Académie des Sciences bears but slight trace of the terrible experience through which France is now passing, an experience all well-wishers of our traditional friend trust will have a speedy ending. It is thus a grateful sign that science may pursue her way unperturbed by the conflicts of the hour, and may have nothing to unlearn or to forget when the period of destruction and suffering brought about by an outbreak of man's basest passions shall have at last been brought to a close.

The most attractive part of the *Annual* for one interested in the history of science is the complete biographical index of all the members and correspondants from 1795 to 1917 (pp. 111–288). In this register of 1,188 names appear all the leaders in French science for the

period mentioned, and a large number of those in foreign lands. The name of one of the greatest men in the world's political history is also to be found here, that of Napoleon Bonaparte, who was elected resident member of the section of mechanical arts in the First Class of the reorganized Institut National, on December 25, 1797 (5th Nivôse An VI.); two years later he became president of this class. It should be borne in mind that this was at the very outset of his career, in the year of the first Italian campaign. In our own day another soldier of France, General Gallieni (died May 27, 1916), who aided greatly in the defense of Paris during the critical first weeks of September, 1914, was a correspondent of the section of geography and navigation.

One of the most interesting figures among the academicians of the past century was the centenarian chemist, Michel Eugène Chevreul, born September 1, 1786, elected member of the section of chemistry, August 7, 1826, president of the Académie in 1839 and 1867 and who died in Paris April 9, 1889, aged one hundred and two years, seven months and eight days, his lifetime extending from the reign of Louis XVI. down to the centenary of the French Republic.

The oldest member living at the time the *Annuaire* went to press was the rural economist Jean Jacques Schlœsing, born in Marseilles, July 9, 1824, and therefore now in his ninety-third year. The Académie counts two other nonogenarians, the rural economist Auguste Chauveau, born November 21, 1827, and the mathematician Charles Wolf, born November 27, 1827; there are a half-dozen octogenarians.

Of the correspondents chosen from 1795 to 1917, eighteen were born in the United States; three of them, the astronomers Edward Charles Pickering and George Ellery Hale, and William Morris Davis, correspondent of the section of Geography and Navigation, are still living.

The organization of the Académie at the present time permits the election of 66 full members (Membres Titulaires), six for each of the eleven sections. There are besides two perpetual secretaries, one for the division of mathematical sciences, the other for that of physical sciences, ten Académiciens Libres, six Membres Non Résident, and twelve Associés Étrangers; to these may be added 116 correspondents. The full complement in the different classes, and the number actually registered at present, are given as follows:

	Allowed by Statutes	Registered in Yearbook
Membres Titulaires	66	57
Secrétaires Perpétuels	2	2
Académiciens Libres	10	9
Membres Non Résidents	6	4
Associés Étrangers	12	6

The members of the Académie are distributed in eleven sections, the division *sciences mathématiques* comprising five sections, geometry, mechanics, astronomy, geography and navigation and general physics, the *sciences physiques* embracing the following six sections: chemistry, mineralogy, botany, rural economy, anatomy and zoology, and medicine and surgery. Each of these eleven sections is restricted to a membership of six, so that a scientific specialist, however great his renown, must await not merely a vacancy in the Académie, but one in the particular section to which he belongs. By this means an equal balance is always maintained and there can be no undue preponderance of any single scientific branch, or of any group of such branches.

G. F. K.

THE PINK BOLL WORM

THE newspapers of the country in the last few months have called attention to the fact that a most serious pest of the cotton plant known as the pink boll worm (*Gelechia gossypiella* Saund.) has been established in northern Mexico through the shipment of several tons of Egyptian cotton seed to that country in 1910. The insect is one which is especially likely to be transported over long distances. It can live for more than a year in stored cotton seed, thus furnishing an opportunity for shipment to the remotest parts of the globe. As a matter of fact it was carried from