

The mystery consists in placing the finger over the upper hole and air channel exactly in the correct place. Usually a piece of cloth, skin, etc., is tied around the cane at this point.

The National Museum has specimens of this instrument from the following tribes, viz., Apaches, Cocopas, Mohaves, Papagos, Pimas, Rees and Shoshones. Other examples have a tube with septum made by splitting a cylinder, excavating the halves and gluing them together.

I had supposed until recently that this method of constructing the flageolet was not to be found outside of North America. I have never read a description of this instrument except from travelers in North America. But recently in a collection of specimens made by Dr. W. L. Abbott, at Siaba Bay, Island of Nias, off the west coast of Sumatra, I find a specimen made in the manner stated above except that in the place of a septum the bore of the cane is plugged with wax. The covering of the upper hole and air channel is a long leaf wrapped around and protected by a bandage of cotton sheeting.

It has seven finger holes and a thumb hole. Its Malay name is Siro'oni.

E. H. HAWLEY.

SCIENTIFIC AND TECHNICAL EXAMINATIONS.

THE United States Civil Service Commission invites special attention to the examinations which will be held, beginning October 21, 1903, at various places throughout the United States, for the following-named positions:

Acting assistant-surgeon, Public Health and Marine Hospital Service.

Aid, Coast and Geodetic Survey.

Assistant examiner, Patent Office.

Assistant (scientific), Department of Agriculture.

Bookkeeper, Departmental Service.

Civil and electrical engineer, Departmental Service.

Civil and electrical engineer, Philippine Service.

Civil engineer and draftsman.

Computer:

Coast and Geodetic Survey.

Nautical Almanac Office.

Naval Observatory.

Deck officer, Coast and Geodetic Survey.

Draftsman:

Architectural.

Copyist, topographic.

Junior architectural.

Topographic, Land Office Service.

Electrical engineer and draftsman.

Engineering and hydrographic aid.

Farmer—industrial teacher.

Farmer—industrial teacher with a knowledge of irrigation.

Fish culturist.

Irrigation engineer.

Kindergarten teacher.

Manual training teacher.

Matron — seamstress — female industrial teacher.

Meat inspector.

Mechanical and electrical engineer.

Observer.

Pharmacist, Public Health and Marine-Hospital Service.

Physician, Indian Service.

Superintendent of construction.

Teacher, Indian Service.

Trained nurse, Indian Service.

Trained nurse, Philippine Service.

As the demand for persons with these qualifications is greater than the present supply, the Commission invites all persons who are qualified to take these examinations, as they offer an excellent opportunity to enter the Federal service, with good prospect for advancement. Information concerning the character of these examinations, the required qualification, age limits, salaries at which appointments are made, etc., may be found in the Manual of Examinations revised to July 1, 1903.

SCIENTIFIC NOTES AND NEWS.

DR. H. W. WILEY, chief of the Bureau of Chemistry, U. S. Department of Agriculture, has returned from Europe, where he has been studying the question of enforcing the law in regard to the exclusion of adulterated and falsely labeled food.

PROFESSOR H. S. GRAVES has returned from Europe where he has been making a study of the schools of forestry in Germany and Austria.

DR. C. E. BEECHER, professor of historical geology at Yale University, has during the summer been carrying on paleontological work in Canada, especially in the Lake St. John region of Quebec.

PRESIDENT HARPER, of the University of Chicago, has returned to the United States. He has spent most of the summer in Turkey making arrangements for the proposed Babylonian explorations.

THE Vienna Academy of Sciences has appointed a committee to study pitchblende, the substance from which radium is derived. Baron Auer von Welsbach, has placed his laboratories at the disposal of the committee.

SEVERAL members of the commission on London traffic, including Sir David Barbour and Baron Ribblesdale, have sailed for the United States to inquire into the street railway systems of New York and Boston.

THE Emperor of Germany has conferred the title of *Wirklicher Geheimer Rath*, on Professor E. von Behring, the eminent pathologist.

PROFESSOR FREDERICK C. CLARKE, head of the Department of Economics and Sociology of the Ohio State University, committed suicide on September 19.

DR. FRANK A. HILL, secretary of the Massachusetts State Board of Education, a trustee of the Massachusetts Institute of Technology, of the State Agricultural College at Albany and of the Boston Museum of Fine Arts, died on September 12, at the age of sixty-two years.

PROFESSOR ALEXANDER BAIN, for many years professor of logic in the University of Aberdeen, died on September 17, at the age of eighty-five years. Dr. Bain was the author of an important series of books on psychology, logic and English. His works on 'The Senses and the Intellect,' in 1855, and 'The Emotions and the Will,' in 1859, in many ways laid the foundations of modern scientific psychology.

THE directors of the Dallas Commercial Club have called a national convention to be held in Dallas on October 8, to consider the boll weevil situation in the cotton growing districts. The attendance of delegates from all the cotton states and of representatives of the national Department of Agriculture is desired.

A PRESS despatch from Berlin states that the imperial budget for 1904, now in preparation, allots \$37,500 for combating typhus, which is specially virulent in Bavaria, Prussia and Alsace-Lorraine. The contamination of the rivers appears to be frequently the cause of the fever.

WE learn from *Nature* that shortly before his death, the late Professor Nocard, of Paris, strongly urged the authorities of the Liverpool School of Tropical Medicine to make the institution available for the instruction of veterinary surgeons. A committee has now been formed for the purpose of giving effect to this suggestion, and the veterinary branch is open for the reception and instruction of students. It is under the direction of Professors Boyce and Sherrington, with adequate assistance, and a farm has been provided at Runcorn for its requirements.

The Electrical World and Engineer states that M. H. Duportal, the French inspector-général des Ponts et Chaussée, has selected St. Gervais as the starting point for the railway which, it is hoped, in a few years, will reach the summit of Mont Blanc. The project is identified with the name of M. Vallot, the director of the Mont Blanc Observatory, and is for a railway starting from Les Houches. The idea seems to be to get the shortest possible and most sheltered line, enabling the summit to be reached in all seasons; and it is conceded that M. Vallot's survey is the best possible for the purpose. M. Duportal's scheme does not supersede its predecessor, however; rather it will prepare the way for it; and it has the great merit of serving the immediate and practical necessities of the district. The first section of the proposed electric line reaches the Aiguille de Gouter almost direct from Fayet by way of the Bion-

nassay Valley, which faces full south, and consequently is always free from snow early in the year, at any rate as far as the Tête Rousse. An open-air line by this route is, therefore, feasible; and this is important, as tourists naturally desire to see the perspectives of the mountains, which would be impossible if the line should be tunneled all the way.

THE annual report for 1902 on the ice-conditions in the arctic seas has been issued by the Danish Meteorological Institute. According to the abstract in the *Geographical Journal*, information has come to hand in somewhat fuller measure than in the previous year. After a review of the state of the ice in the different seas around the polar area, the following general conclusions are arrived at. In 1902 the winter ice broke up very late, and the polar ice lay considerably nearer the northern coasts of Asia and Europe than in a normal year. The East Greenland current carried an abnormal quantity of pack-ice, though on the other hand an unusually small number of icebergs were carried from Greenland to the temperate seas, while the extent of polar ice in the northern branches of Baffin bay was smaller than in other recent years. The summer was rough and unsettled in all arctic and subarctic regions (with the partial exception of West Greenland), northerly and easterly winds predominating in the seas north of the Atlantic. These facts quite bear out the conclusions drawn from a consideration of the state of the ice in 1901, viz., that the accumulation of ice north of Spitzbergen caused by the prevailing westerly winds of that year would have an unfavorable influence on the state of the ice round Iceland and Greenland in 1902. Alike in the Barents sea, the region of Franz Josef Land, and around Spitzbergen, East Greenland, and Iceland the conditions were very unfavorable. The northeast, east, and southeast coasts of Spitzbergen were quite inaccessible through the summer; the pack-ice lay in a close broad belt off the coast of East Greenland, rendering access to the northern parts of the coast exceedingly difficult; while round Iceland the state of the ice was more unfavorable than ever since 1892.

UNIVERSITY AND EDUCATIONAL NEWS.

A GIFT of another \$300,000 dormitory to the Sheffield Scientific School of Yale University by Mr. F. W. Vanderbilt, Yale, '76, of New York, is announced. About a year ago Mr. Vanderbilt gave a dormitory to the Sheffield Scientific School in memory of the late Cornelius Vanderbilt.

THE California Methodist Episcopal Conference has completed the work of raising an endowment fund of \$100,000 for the University of the Pacific.

By the gift of a daughter of the late Charles Pratt of Brooklyn, the Department of Physical Education of Amherst College is to receive an additional annual income of \$1,500. Under the conditions of the gift, a graduate of the college may by a year or more of work in the theory and practise of physical education fit himself to become a teacher of that science, while assisting in the work of the department.

AFTER many delays the Pittsburg city councils have authorized the mayor to accept on behalf of the city the Flynn-Magee site purchased for the location of the Carnegie Technological School. The site includes thirty-two acres on the eastern border of Schenley Park.

WILLIAMS HALL, the new building to be devoted to the departments of geology and mechanical engineering at Lehigh University, will be formally opened on October 8, in connection with the twenty-fourth annual celebration of Founder's Day. Addresses will be delivered by Professor Edward H. Williams, Jr., of the department of geology and mining, who is the principal donor of the building, and by Dr. Rossiter W. Raymond, secretary of the American Institute of Mining Engineers.

BRIEFS have been filed opposing the application of the trustees of Rutgers College for the payment of \$80,000 allowed by the last New Jersey legislature in settlement of the claim of the college for back scholarships.

THERE has been incorporated in Quebec a school for the purpose of establishing and carrying on an agricultural school, and experimental farms. This school is to maintain