

THE MISTRAL.

THE *mistral* is well known as a strong cold wind which is common in the region about Marseilles, in southern France. It occurs when there is a barometric gradient to the south from the plateau of Central France, the cold air flowing quickly down the gradient and producing what the Germans have well named a *Fall-wind*. In the districts which are subject to frequent mistrals, the trees are bent to the southeast under the influence of the strong northwest wind, and the gardens are protected by means of high walls. The mistral is often so violent as to cause considerable damage, and sometimes even loss of life. Kassner, in *Das Wetter* for February, mentions the case of a mistral which occurred on January 20th, of this year. A carriage in which a lady was driving was blown into a canal, and the passenger and horse were drowned. One man was severely cut in the head by a tile which was blown from a roof, and another was thrown down by the wind and badly hurt. In view of the accident to the carriage above referred to, the mayor of Marseilles issued an order to the effect that hereafter no carriages are to be allowed to drive along the canals or the water-front while a mistral is blowing. Ordinary street traffic in Marseilles is always considerably interfered with by a violent or a long-continued mistral.

TYPHOONS OF THE PHILIPPINE ISLANDS.

THE Manila Observatory, under the direction of the Jesuit Fathers, has been keeping on with its excellent meteorological work throughout the troublous times of the past two years or more. The latest publication which has come to hand from the Observatory is a report by Father Doyle, entitled, *Tifones del Archipelago Filipino y Mares circunvecinos 1895 y 1896*. This is a valuable extension of the work already done by the Manila Observatory in connection with the typhoons, or *baguios*, of the Philippine region, and is a fitting supplement to Father Algué's report, *Baguios ó Ciclones Filipinos*, dated 1897. The present report gives a detailed account of the different typhoons, with tabulated meteorological observations relating to them. The tracks are plotted on a series of eight maps, and the fluctuations in atmospheric

pressure noted during the passage of three special typhoons are represented graphically.

CLIMATE AND MILITARY OPERATIONS.

The Influence of Climate on Military Operations is the title of a chapter in a recent work on *Outlines of Military Geography*, by T. M. Maguire (Cambridge, Eng., 1899, Cambridge Geographical Series). Dwellers on plains are compared with dwellers in mountainous regions; the severity of the seasons is noted in connection with Napoleon's Russian expedition and other military campaigns, and the subject of disease among troops is also touched upon.

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PATENTS AND THE INDUSTRIES.

THE recently published report of the U. S. Commissioner of Patents is a reminder of the facts that this system of protection of the inventor and of assurance to him of the product of his brain, a system to which those familiar with the subject attribute a large share of our unexampled progress in the arts and industries, has, of late years, received far less consideration than formerly and that it has not been cared for as it should be. It is the most remarkable stimulant to invention that the world has yet seen, and to it the country owes more than can be either estimated or compensated. Yet apparently neither the committees to which its interests are entrusted, nor the Congress itself gives much consideration to its needs or its deserts. Nearly 50,000 applications for patents on new inventions have been recorded in a single year. The receipts of the office were last year far above its expenditures—\$1,325,457 and \$1,211,783—and this has been the fact in every year of its century of existence, with the exception of but eight. In 1883, the surplus for the year amounted to about a half million dollars. The total balance of the Patent Office to-day amounts to \$5,086,649; but Congress does not even permit this earned capital to be appropriated to the needs of the Patent Office. It has a wealth of resources and is annually adding to them; yet it is permitted to need additions to its staff of examiners, to suffer for lack of additions to its library, which should be the

finest technical library in the world, to need larger and better quarters for its work, and it is even crowded in its own building by squatting bureaus of the Treasury Department Land Office.

The report on the number of patents issued in 1899 gives the number from New York as 3798; Pennsylvania, 2355; Illinois, 2152; Massachusetts, 1774; Ohio, 1501. Connecticut, however, as famous as ever in this direction, leads the list in inventiveness, securing one patent to each 945 inhabitants; the District of Columbia, curiously enough, but probably by a legal fiction, follows with 1 to every 1151, Massachusetts with 1 to each 1261 people, Rhode Island with 1 to 1270, New York coming in as number eight, with 1 to 1579. South Carolina ends the list with 1 to 25,024 people and North Carolina is next with 1 to 21,012. New England, as always, stands in the van, for the United States and the world, in inventiveness.

Of other countries, Great Britain leads, Germany stands next, and France is third in the list of foreign patentees in the United States Patent Office.

In performing their work of research, to solve the question of originality on the part of the inventor, the examiners have to seek among 700,000 earlier United States patents, 1,250,000 foreign patents and 74,000 published volumes of inventions and scientific and industrial treatises. But, as the Commissioner states, "The lack of suitable room greatly hampers and unnecessarily delays the work in many divisions."

This is now the regular and invariable general formula of the report of the United States Patent Office. It has been thus for many years past; exhibiting an enormous amount of work, performed under most unfavorable conditions; giving our country the leading position in invention, and in many industries; promoting the wealth of the nation enormously; earning an annual surplus; yet refused the use of its own earnings even to provide imperatively needed space and equipment, and forbidden even to add to its own library, its most essential tool, or to dispose of duplicate and useless books in exchange for others more needed.

Through the efforts and the genius of our in-

ventors, the cost of products in every department of industry has been reduced to a fraction of the figures of a generation ago; the work of one man had been made more effective than was then the work of, in some cases, a dozen, and the wealth of the country is, by these means, being augmented, and all its attendant comforts and privileges increased to the average citizen, at the rate of one hundred per cent. in a generation. Yet the inventor is ungratefully neglected, and Congress devotes itself to 'politics' rather than statecraft.

Many organizations, and hundreds of individual citizens, made aware of these discreditable facts, are urging upon members of Congress to give proper attention to the Patent Office; but it apparently will require more pressure than the American Society of Mechanical Engineers, and all the other national associations seeking to promote this reform, can exert to insure attention to a primary duty. Every citizen has an interest in this matter, and should do what he can to bring about a reform in Congress, and the provision for the Patent Office of every need and convenience.

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SCHOLARS the world over are appreciative of the achievements of the late Daniel Garrison Brinton for he established on a firm basis the branches of learning to which he devoted his life. He is justly named the 'Founder of American Anthropology.'

A close student of the intricate problems of his science, he possessed the rare art of clearly and concisely presenting facts at their true values. He believed in 'The general inculcation of the love of truth, scientific, verifiable truth' and that knowledge should subserve usefulness.

A keen observer, a classical scholar, an adept in the methods of logic and philosophy, Dr. Brinton had ever the practical application of truth in view. To the systematic study of man he brought to bear his all rounded culture to further the happiness and fullness of the individual life. He regarded the individual as the starting point and goal of anthropology. Upon