

Scientific Items.

OBSTINATE NEURALGIA.—*La France Médicale* mentions several obstinate cases of neuralgia of the fifth nerve rapidly and completely cured by the administration of ammoniacal sulphate of copper. The formula employed is the following: Distilled water 100 grains; syrup of orange flower or peppermint 30 grains; ammoniacal sulphate of copper, 0.10 to 0.15 of a grain—to be taken in the course of twenty-four hours, especially after meals, in order to avoid irritating the stomach. The dose in question is the medium one, and is to be continued for from ten to fifteen days, even after the complete disappearance of the pains.

A SUBSTITUTE FOR WICKERSCHEIMER'S FLUID which is said to be an equally efficacious preservative, and to have the advantage of being non-poisonous, is suggested by Hager in the *Pharm. Ztg.*, as follows:

Salicylic acid.....	20 parts.
Boric acid.....	25 “
Potassium carbonate.....	5 “
Dissolve in hot water.....	500 “
Glycerine.....	200 “
Then add: Oil of cinnamon, oil of cloves, each 15 parts, dissolved in alcohol.....	500 “

HYDRATE OF CHLORAL AS AN ANTIDOTE FOR STRYCHNIA.—In the *British Medical Journal*, Dr. George Grey reports a case of poisoning by strychnia successfully antidoted by administrations of chloral hydrate. The patient had swallowed 20 grains of strychnia, and was saved by the administration of two drachms of chloral hydrate in solution. In two days the patient was doing his usual work.

SALICYLIC acid, in contact with wood fibre, is soon absorbed and decomposed. When used, for example, as an addition to drinking water or to wine as a preservative, in wooden tanks or casks, its preservative influence speedily ceases, and no trace of the acid can be detected. For such purposes, therefore, casks and other vessels intended to receive salicylized water, wine and other liquids, should first be coated with pitch.

THE RECENT COMET.

The spectrum of this comet, known in Europe as Hartwig's comet, from its discoverer, was examined with a spectroscope, at the Royal Observatory, Greenwich, on the evening of Oct. 7th, and was found to consist of three bright bands, and a continuous spectrum corresponding to the nucleus. The position of only of those bands—the middle and brightest—could be ascertained, and that is no very satisfactory manner. The positions of the other bands were not measured at all, owing to the unfavorable nature of the weather, the comet being low and involved in haze and cloud.

The opinion is expressed by Prof. Winecke, of Strasburg, that this comet is identical with one seen Sept. 29th, 1506, and its position roughly described by European observers of that date. Mention is also made of the same comet in Chinese annals of that date. The Professor also remarks that early Chinese observations have been found of much assistance in enabling astronomers of the present century to approximate the orbits of comets. Two appearances, one in 568 and another in 1337, are particularly referred to, in addition to the present one. The Chinese have the record of a very remarkable comet that appeared A. D. 178, which, from the long tracks it described in the heavens, must have passed very near the earth.

The following paragraph may be interesting as showing the manner in which such observations were placed on record in those early days. The comet described is supposed to have been the one to which attention is now being directed: “As regards European observations of the comet of 1506, Pingre tells us (on the authority of the *Chronicles* which, according to his excellent custom, are named in his margins) that a comet was seen in the month of August in the north, or between the north and east, or lastly between the west and north, and as the comet was not distant from the pole, so that it appeared in the evening after sunset, and in the morning before sunrise, it may have had at different hours of the night the various positions mentioned by the historians. It had a long and bright tail which extended ‘between the fore and hind wheels of the chariot.’ On August 8th, a Polish historian, an eye-witness, says it was seen near the pole above ‘the seven stars or the stars of the great chariot;’ on the following night it was situated amongst the same stars,

and later, on several nights, it was seen below them; declining by the signs Cancer, Leo and Virgo, it attained the northern part of the horizon and disappeared on August 14th. Some writers limit its appearance to eight days; others say it was visible for three weeks, or even a month.”

The same comet was described in the Chinese annals, and translated by Biot and Williams, as follows: “We read that in the first year of the epoch Ching Tih, in the region of Woo Tsung, on the day Ke Chow of the seventh moon (1506, July 31st), a star was seen to the west without the boundary of Taze Wei (the circle of perpetual apparition). After some days it had a short tail. It was seen between the sidereal divisions Tsan (determined by *della*, Orionis) and Tsing (by *mu*, Geminorum); (the Chinese sidereal divisions, it must be remembered, being intervals of right ascension with wide limits of declination reckoned from the determining star of the division.) It gradually lengthened, extending in a northerly direction towards or to Wan Chang (*theta*, *upsilon*, *phi*, Ursa Majoris). On August 10th it was bright, and moved to the southeast, it lengthened to about 5° and swept the upper of the stars Hea Tac (*nu*, *xi*, Ursa Majoris), and entered within the space Tae Wei Yuen (Biot's *Thai-Wei*); (a space between stars in Leo and Virgo, to which, as also to Taze Wei; the circle of perpetual apparition mentioned above, constant reference is made in the Chinese cometary observations.)”

THE LOST CONTINENT—ATLANTIC.

From *Science for All* we glean the following interesting article: According to the ancients, there once existed in the Atlantic Ocean, opposite Mount Atlas, a great island adorned with every beauty and possessing a numerous population. Its princes were powerful, so that they invaded Europe and Africa, but by an overwhelming catastrophe the island was swallowed up in a day and a night. This legend is said to have been related to Solon by the Egyptian priests, and is given by Plato in “*Timeus*.” It probably had its origin in the existence of the Azores or the Canary Islands, which may have been visited by the Phœnicians. Our purpose is to prove that this fable has been far exceeded by the reality—that there once existed in the area now covered by the North Atlantic, an Atlantic of continental size, and of an antiquity compared with which Plato's island is but of yesterday. Some geologists are of opinion that North America was connected by land with Europe in middle tertiary (Miocene) times. The evidence upon which this theory is based is the resemblance of the existing plant life of North America to that which flourished in Western Europe in the Miocene epoch. The plants are supposed to have migrated from east to west by way of this imagined Atlantic land. It seems extremely unlikely, however, that so great changes in the physical geography of the globe should have taken place within times comparatively so recent. The deeper parts of the Atlantic are from 12,000 to 16,000 feet, and we require very strong evidence to convince us that such enormous depressions have occurred since a comparatively recent geological period. The migration of the Miocene flora may be more easily explained. The land connection between Europe and North America by way of Asia is broken only by Behring's Straits, which are very shallow; and a slight elevation would make it complete. That the migration has been from west to east, across Europe and Asia, receives confirmation from the fact that a flora similar to the North America has been discovered in Japan. It is, therefore, unnecessary to create an Atlantic continent to account for the migration of the Miocene flora. The continent of which we speak is of incomparably greater antiquity. No traces of it now remain, unless the submarine ridge, which runs down the Atlantic valley in about 50 degrees west longitude, be its denuded foundations. This ridge represents a great mountain range rising 4,000 feet above the valley to the west, and 8,000 feet above the valley to the east; and reaching to within about 4,000 feet of the surface of the ocean. The Atlantic islands are not in any way connected with this ancient land. They are of volcanic origin, rising steeply out of a deep ocean, and are of comparatively modern date, the oldest strata contained in them being of middle tertiary age. The destruction of the old Atlantis strikingly illustrates the instability of the land. At an epoch inconceivably remote the Atlantic rolled as it is rolling now. Then a huge island raised its back above the waters, and, despite the hammering and grinding action of the waves, grew up into a continent, with river systems and great mountain chains. Rain, frost, ice and carbonic acid, were all the time at work upon its surface, coroding, filing, sawing, dissolving, softening, and washing down, till, after it had braved the elements for many