

**Bacteriotherapy.**

"Bacteriotherapy" is the designation appropriated for a new method of treatment introduced by Professor Cantani, based upon the recognized phenomenon of the "crowding out" of one species of micro-organisms by another better suited to the prevailing conditions (*Brit. Med. Jour.*, Aug. 29, p. 403). In a first experiment, daily inhalations of *Bacterium termo*, an organism assumed to be harmless, on the strength of experiments on animals, were administered to a patient suffering from tuberculosis, through the medium of a culture in gelatine diluted with meat broth and diffused by an ordinary spray producer. Professor Cantani reports that the tubercle bacilli in the sputum gradually became fewer, being replaced by the bacteria, and in less than a month had disappeared altogether, the sputum being no longer capable of conveying tuberculosis to animals. Meanwhile the patient had gained flesh and improved in every way. It is admitted that, outside the body, these bacteria do not always so successfully dispose of the tubercle bacilli, and that the two kinds of organisms even sometimes occur together in tubercular cavities; but the explanation suggested is that in the case reported the bacteria were introduced in large quantities and probably in a vehicle more favorable to them than to the bacilli. Does this foreshadow a recrudescence of contributions to the official materia medica from the animal kingdom?—*Pharmaceut. Journal*.

**The Palace at Jeypore.**

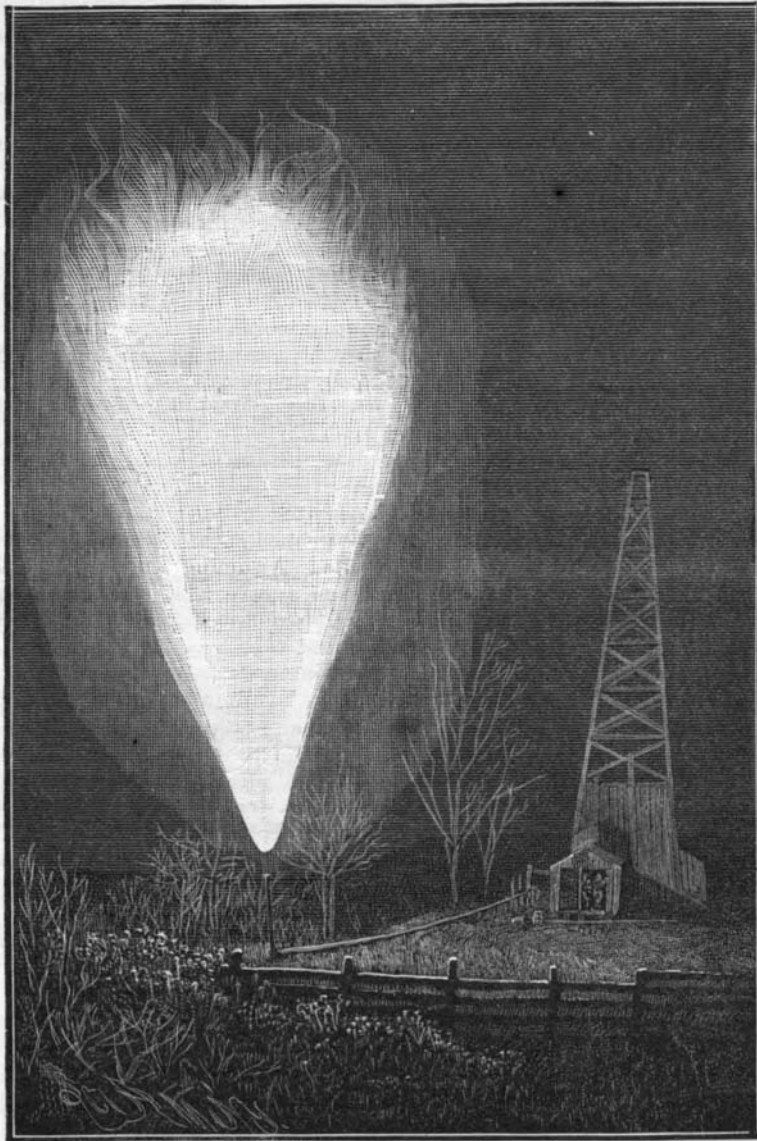
Mr. Sala has had the good fortune to visit the Great Palace of Jeypore, and writes about it thus in the *London Telegraph*: Seven stories of such wild and lovely structure as you would expect to see only in dreams rise here one above the other in rose red and snowy white balconies, oriels, arches, pilasters, lattices, and domes—gay everywhere with frescoes and floral ornaments. In this lowest floor, which is kept—like the second and third—as a winter residence, we are permitted to inspect a priceless volume, the abstract of the Mahabharata, in Persian, made by the orders of Akbar the Great at a cost of £40,000, and illustrated in the most exquisite manner with colored and gilded miniature pictures of an incredible delicacy. The Shobha Newas, floor above, is full of strange paintings on the wall, and arcades embellished with gorgeous shells of copper, silver, and foil. Next we ascend to the Chhabl Newas, or "hall of splendor," shining with polished marbles and colored enameling. Above this is the Shish Mahal, the pavilion of glass, with endless patterns wrought in little mirrors let into carved plaster work, and above that we step forth upon the Mokt, or "crown," of the palace, where the vast flat roof is encircled with shady alcoves and open chambers, vaulted by graceful curved cupolas. Beneath lie the green palace gardens, full of pomegranates, palms, and bananas; and beyond, the spread of the countless busy streets and lanes, girdled by the walls, and overhung by the encircling hills, topped with forts and temples. It is vain to attempt any description of that enchanting prospect, more absorbing than any which India herself can offer. Nature and man have here allied themselves to produce the most perfect and lovely landscape conceivable. In green and gold, in rose color and white, in distant, dim blues and grays, the gardens and the city, and the far off walls and mountain ridges of amber, group together at our feet—a picture to delight the eye and feast the mind. But how can words reproduce Govinda's temple, between the upper and lower gardens; the snow white sides of the Badal Mahal, or "Cloud Palace," on the edge of the lake; the dark ramparts of the fortress in the mountains, and those long lines of rose red streets which intersect Jeypore? To complete the rich colors of the scene, a feast is being given to Brahman men and women on one of the many flat roofs of the upper palace, and attendants go about bearing the Maharajah's bounty in the form of cakes and sweetmeats amid some three or four hundred men and women clad in holiday dresses of crimson and purple, saffron and blue, glittering like flowers in the sun, which shines upon the "City of Victory" as if its people were indeed his children. Whoever has viewed that prospect from the palace roof of Jeypore has seen India in her inmost grace and beauty.

**The Zinc Architectural Works.**

On the night of March 5 the entire stamping department of the Zinc Architectural Ornament Works of Messrs. Bakewell & Mullins, at Salem, Ohio, was destroyed by fire. The plant will be replaced at once, and orders filled as promptly as circumstances permit.

**Soda Lakes in Wyoming.**

A newspaper published at Laramie with the significant title of the *Boomerang*, referring to a recent article in the SCIENTIFIC AMERICAN on the manufacture of soda at Owen's Lake, Cal., says that if the right kind of men, with plenty of energy and abundant means, were to take hold of the business in Wyoming Territory, they would find their reward. The writer affirms that in this Territory, Nature has done all that she could to save man trouble. Here there is no necessity for portable engines or for vats. It is not necessary to wait a year in order to gather a crop of soda. Not only have we a cluster of lakes of the solid stuff within two hours' drive of Laramie, and with a railroad running directly to their banks from this city, but similar lakes are found in various parts of Wyoming. No pumping or settling is required, the soda gathers itself and solidifies like ice. All that is necessary is to dig it out with a pick and shovel, haul it to the chemical works in this city, and work it up. The soda plant at Laramie has been greatly enlarged and improved during the past winter, and will now have a capacity one-third greater than it was originally designed for, yet it will not handle one-third of the yield of lakes on the Laramie plains. Thus far only one of these lakes has been drained and



THE KARG NATURAL GAS WELL AT FINDLAY, O.

worked. There are two larger lakes, either one of which would keep a plant as large as that in Laramie going the year round, and in all the supply is inexhaustible, the deposits being constantly built up from some underground basin; but these lakes are not so extensive as others in the Territory which have not as yet been touched.

**Natural Gas at Narrowsburg.**

The existence of natural gas at Narrowsburg was discovered in a curious way by Dr. L. A. Winslow, in 1856. He was spending the summer at the Murray House, in that village. The Delaware River at that place forms into a deep and wide lake-like body known as Big Eddy. On the Pennsylvania side of the eddy there is a whirlpool so strong that frequently rafts are drawn into it and kept whirling about for hours and sometimes days before they can be turned into the channel again. One day Dr. Winslow was rowing on the eddy. After lighting his pipe he threw the match, still blazing, into the river. Instantly a blaze started up in the water where the match had dropped. It burned with a faint blue light, and finally went out. Then, for the first time, Dr. Winslow noticed that many bubbles were floating about on the water, and that they appeared frequently, coming quickly up from under the surface. The Doctor, being something of a geologist and scientist, knew at once that the bubbles were made by a gas that must come from the ground or rocks at the bottom of the river, and that

the gas was inflammable. He touched a match to several of the bubbles, and each one responded with a blaze. At night he illuminated the entire eddy with these miniature natural bonfires. Dr. Winslow sounded the eddy, and found that in places the water was ninety feet deep, with a rocky bottom, and at some places he could find no bottom at all. His theory was that the rocky bottom was filled with crevices of unknown depth, and from them gas issued and found its way to the surface, forming the constantly appearing and disappearing bubbles.

In the mud along the shores of the eddy, and on islands of similar formation, this gas also found its way from the depths to the surface. Dr. Winslow inverted a barrel with one head out over a spot on the New York shore where the gas came up out of the ground. He placed a small pipe in the other end of the barrel, and in a short time collected enough gas in the barrel to make a strong and brilliant flame at the end of the pipe when ignited, which burned steadily night and day.

**A NATURAL GAS WELL.**

The accompanying engraving is from a photograph of the mammoth Karg well at Findlay, Ohio. The photograph was taken by night, and the enormous height reached by the flame may be judged by contrast with the derrick in the background. The capacity of the well is estimated at forty million cubic feet per diem.

**Taking Down an Iron Mast.**

An interesting and very difficult mechanical feat was performed in Akron recently, in the taking down of an iron electric light mast 213 feet in height above ground. The mast was composed of fifty-five sections of boiler plate, each fifty inches in length and varying in thickness from one-half inch at the base to three-eighths inch, five-sixteenths inch, one-fourth inch, and at the top three-sixteenths inch. The diameter at the base was three feet, and at the top eight inches. The entire weight of the plate removed was eight tons. A change in the system of street lighting led to the abandonment of the mast, and the contract for taking it down and removing it was given to the Buckeye Machine Company, of Cleveland, whose efficient general manager and engineer, Mr. Ludwig Herman, had charge of the work. From the outset—the mast itself being bent out of plumb and in a dangerous condition—the task presented numerous and trying difficulties, but careful calculation, coupled with cool-headedness and superior engineering skill, were adequate to successfully grapple them all. The method of removal, briefly, was this: Around the lower sections of the mast, to a height of twenty feet, a staging was erected. This was composed of uprights 8"×8", caps 10"×10", sills 8"×8", braces 2"×10", and struts 6"×6", all securely bolted together. From this staging, by means of chain blocks and swivel rods and peculiarly shaped hooks which took hold under the lap of the successive sections, the mass was suspended while the work of cutting the rivets and removing the sections was carried forward. The hooks in question were held in place by an adjustable band three inches in diameter. After cutting away the lower sections, the whole mast was lowered four inches at a time, the hooks shifted to the lap above, and the lower section cut out again. In this way the work proceeded, the mast being held by ten guys, the manipulation of which required the utmost skill and patience. At one time, during an adverse wind, the top of the mast swayed fifteen inches out of line, but close watching and careful management averted all accidents, and the entire task was successfully completed in a remarkably short period of time. For the first three days one section each day was removed; then three, five, and twelve, and on the last day, twenty-seven.—*Iron Trade Review*.

**Petroleum in New Mexico.**

The report that an artesian flow of petroleum had been discovered in the southern part of Santa Fe County, New Mexico, between the mining villages of Golden and Wallace, has been confirmed, and samples taken to the capital and tested. The oil flows through tubing fifty-five feet down, and the flow is reported to be copious and steady. The crude oil burns freely and with a good flame. Several claims have already been located in the neighborhood of the well.

**To Remove Nitrate of Silver Stains.**

The following is suggested by Mr. George R. Underwood: Dip the fingers into a strong solution of cupric chloride. In about a minute the silver will be converted into chloride, and may then be washed off with hypo.