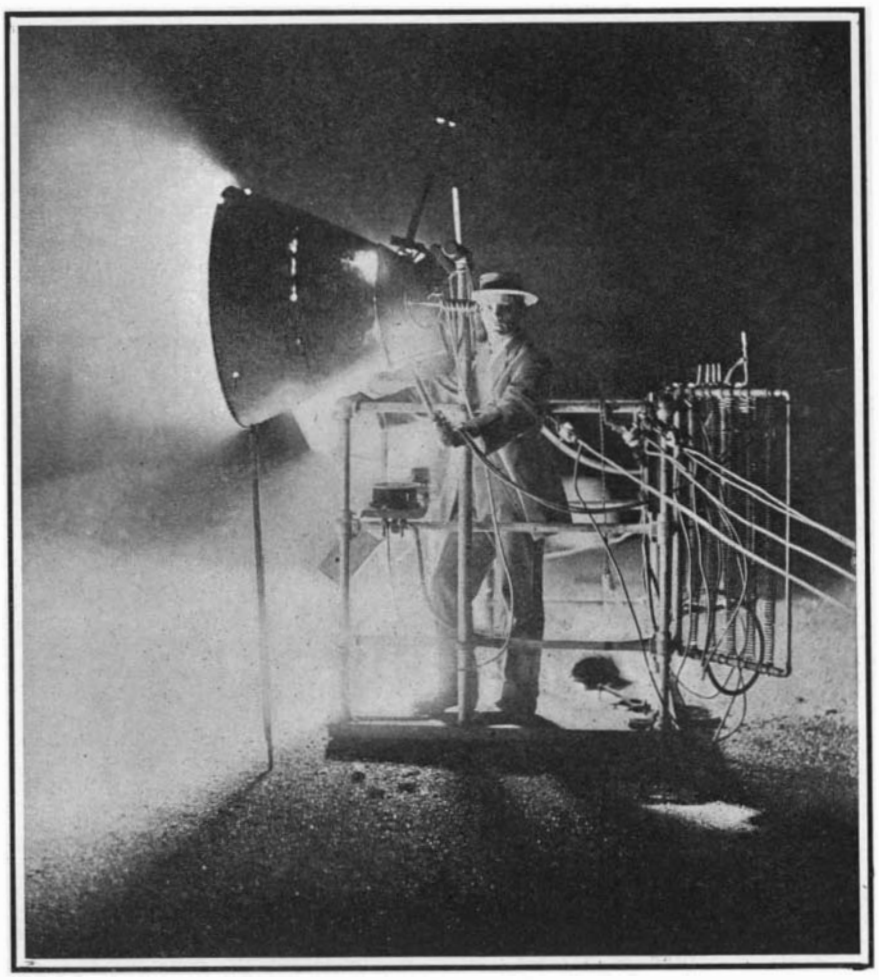
BASEBALL AT NIGHT.

The experiment of playing baseball by night was successfully made recently in Cincinnati. As may be supposed, powerful searchlights were employed to illuminate the baseball field. The Cincinnati National League Baseball Park, where the first game was played, was encircled with 100-foot steel towers, each carrying two extremely powerful carbon lamps, capable of illuminating the entire park. Every corner of the field was brightly illuminated.

Although we have been unable to obtain engineering data on the construction of the lamps, we are informed that the carbons alone are 1⅜ inches in diameter. Three lamps were found almost sufficient to illuminate the park; but to make the undertaking absolutely successful, fourteen lamps were employed to cast their rays upon the grounds. Three-phase current was supplied by a 250-horse-power 60-cycle dynamo, having a speed of 345 revolutions per minute. The voltage is 235. The amount of current generated was enough to run twice the number of lamps, for which reason huge rheostats are employed to take care of the excess. Two of these powerful lamps are mounted behind each fielder. Others cast their rays from the roof of the grand stand and the covered bleachers. The inventor of the lamps is George F. Cahill, who has taken a great interest in what may be termed the mechanical improvement of baseball playing. He is the inventor of an ingenious baseball pitching machine, which has been used with success.



ONE OF THE POWERFUL PROJECTORS.

The Collateral Value of Sanatoria.

BY JOHN B. HUBER, A.M., M.D.

Bodington began, in Sutton Coldfield, England, an institution for the treatment of consumption on "principles natural, rational, and successful." He insisted on generous diet, fresh air day and night; the air within the house was to be as pure as that without, nor could it ever be too cold for a consumptive patient. Here then, was established in 1840 probably the first tuberculosis sanatorium in the modern sense. Its fate? Bodington was regarded as a lunatic; he was contemptuously opposed by many a colleague; his patients were driven from his institution, which he thereupon turned into an asylum for the insane, in which, we now believe, many of his neighbors might fittingly have found an abiding place.

Next in the history of santoria comes Brehmer who, having been attracted by the ideas of "that obscure country doctor" in England, determined, with true Teutonic stubbornness, upon making them enduringly effective. Like Bodington, Brehmer had to endure the lot which so frequently falls to genius and altruism; he also met with much opposition and ridicule, but he persisted until he convinced both his profession and the laity of the soundness of the methods he elaborated. The result is the institution established at Goerbersdorf, in Prussian Silesia, which has from small beginnings, become of world-wide beneficence and influence. It is due to Brehmer's grit that we have now tuberculosis sanatoria over all the civilized world.

Since this inception of the work the building of sanatoria has oftentimes, though not always, been accomplished despite opposition, virulent and most discouraging to those who would believe that our race has really advanced in human emotions. Yet demonstrably the properly conducted sanatorium can hurt no one; on the contrary, it is beneficent from every conceivable viewpoint. A great deal of "phthisiophobia"—from which arises opposition to sanatoria—is based upon ignorance of the nature of infection in tuberculosis. Such infection is not air-borne, as in scarlet fever or measles. Practically speaking, it is conveyed from the consumptive to his fellow human beings only through the sputum. And when this sputum is properly disposed of there is no danger of tuberculous infection. With regard to the danger of infection to the community in which a sanatorium is placed we have but to cite the experiments made at Saranac Lake, where Trudeau established the first American institution upon the modern principles of phthisiotherapy. All the dust in a room of one of the cottages occupied by consumptives was gathered, and a culture made from this dust was, when injected, insufficient to cause tuberculosis in a little guinea pig. A scientifically ordered sanatorium, rather than a menace to any community, is on the contrary a decided influence making in it for healthful living in every possible meaning of the term; its neighbors learn to spit less, to keep their windows open day and night, to live the hygienic life generally. The tuberculosis sanatorium has invariably raised local health standards.

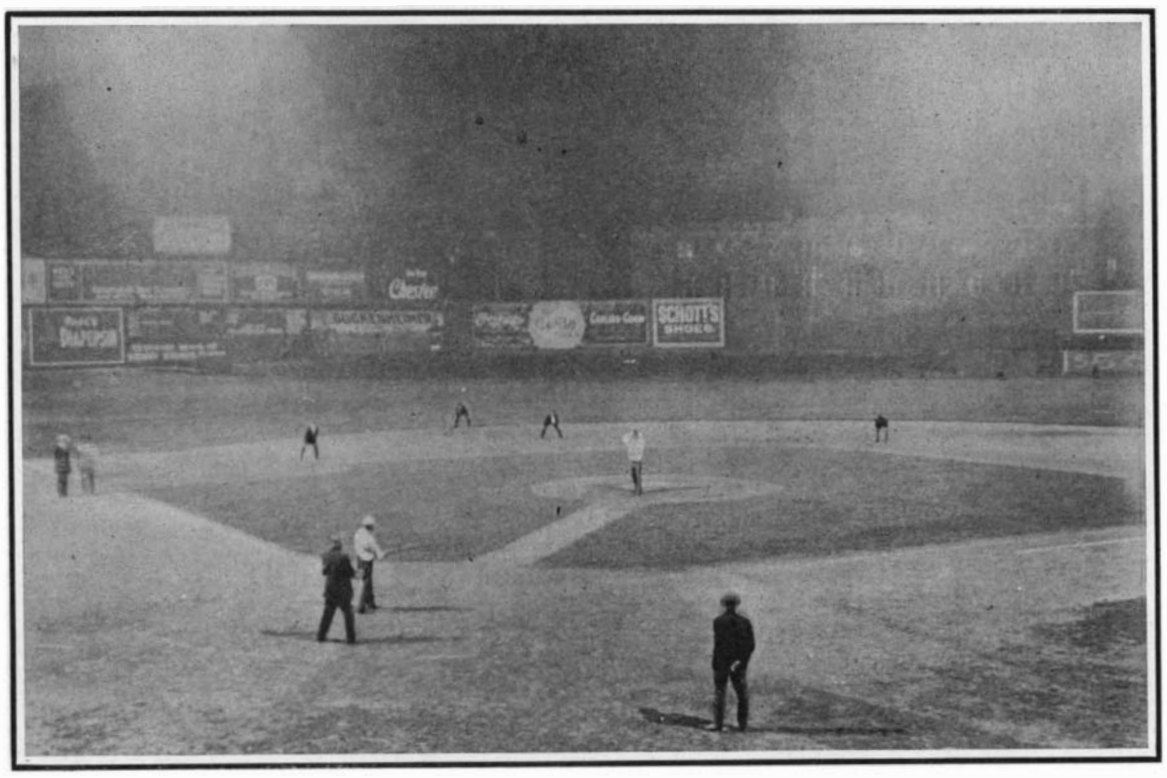
In the sanatorium the consumptive gets well under circumstances the best for all concerned. While there he does not infect his family, his fellow-workmen, and his community; when he leaves he goes forth as a missionary disseminating the precepts of sanitation and prophylaxis he has imbibed. The only trouble is, there are not and probably never will be enough of these institutions to accommodate all the sufferers from this disease; as it is now, only about five per cent can be treated in sanatoria. The rest must get well—and it is quite possible for them—in their own homes.

In the merely commercial sense the sanatorium is a factor decidedly not to be ignored. The rural citizen may begin with fighting its establishment in his vicinity; but give him a little time, and he will probably reason as follows: The sanatorium patients are treated in such manner that so many dozen eggs are required for it every day; also so many hundred quarts of milk, so many pounds of butter, so much cereals, meats in proportion. And where or how could the sanatorium managers get these staples better than from the farmer folk in the neighborhood? If now it is explained to him that the prosperity, for example, of Goerbersdorf has trebled, as has also its population, since the beginning of Brehmer's work, the ruralite will probably begin to "sense" the wherefore of this; then, no doubt, he will throw away the stick he has been whittling, shut up his jackknife and conclude that, for his part, the building of the contemplated institution need not be delayed.

In point of fact, rather than being detrimental, the sanatorium actually causes real estate values in its locality to rise. The National Association for the Study and Prevention of Tuberculosis has gathered from twenty-two States, covering every section of our country, convincing data to this effect. The Survey (June 19, 1909) has summarized these reports: Over 67 per cent of the sanatoria have exerted a favorable influence on surrounding property, and in almost as many cases their effect in raising assessable valuations has been direct and measurable. In most of the other instances no differences were observable; in only three localities was it claimed that residents had been repelled. In the neighborhood of a sanatorium at Portland, Ore., land has more than doubled in value in three years, the greater demand being close to the institution. At Aiken, S. C., land in the vicinity of the sanatorium has quadrupled in value since it was built; at Asheville, N. C., vacant lots near one of the sanatoria sell at four times their price in 1900, and others farther from the institution, but nearer the city, are less valuable; in Hebron, Me., the advance has been 20 per cent. Like results are reported from Luzerne, Pa., Liberty and Saranac Lake, N. Y., Pittsford, Vt., Mt. Vernon, Mo., and Silver City, N. M.

In these places the sanatoria form an important part of local business and it would hardly be fair perhaps, to make them criteria; nevertheless the effects on values are the same in the big cities—New York, St. Louis, Philadelphia, Brooklyn, Boston, Pittsburg. Not a single instance was reported where the presence of a santorium, camp, or dispensary in a large city has had a detrimental effect on the value of nearby property. And the courts of Massachusetts, North Carolina, and Virginia have decided that a tuberculosis sanatorium is not a menace to the health of a community, or to the property in its vicinity.

Finally, the fact that any given locality is selected as desirable for the establishment of a sanatorium in it makes for a guarantee and an advertisement that it is a salubrious region; health resorts get built around it; private cottages are erected. Would the Adirondacks, for example, have become so extensive and profitable a summering place had its destinies not been shaped in Saranac Lake?



BASEBALL AT NIGHT.

Electric freight locomotives have been ordered by the New York, New Haven & Hartford Railroad for trial on its main line.