



## BEER AS A CAUSE OF PELLAGRA

ONE OF the most sensational medical developments of recent times is the discovery that the mysterious disease known as pellagra, thought to be practically nonexistent in this country, has been with us for years and that thousands of patients in homes and hospitals whose troubles had been wrongly diagnosed or were continuing to puzzle the physicians are in reality its victims. Altho medical opinion is not united, the disease seems to be generally attributed to a fungus found in moldy corn. The editor of *Good Health* (Battle Creek, Mich., September) makes the suggestion that beer, when brewed from corn-malt, as it now often is, may contain this fungus and be responsible in part for the occurrence of the malady. He writes:

"The announcement a few years ago that the awful plague, black death, which devastated London two hundred years ago, had reached our shores, was a message which struck terror to a million hearts. Everywhere the question was asked, Will it spread? Will it break out in our town? The discovery of the plague bacillus, and of the agency of rats and fleas in its propagation, to a large extent rid the disease of its terrors because it pointed out the means by which it may be restricted. The revelations relating to pellagra have shown it to be a malady fully as fatal in character as the black death, altho less violent in its destructive force. Its wide diffusion and insidious character render it still more formidable to life and health than the plague. It is now probable that there are hundreds of people suffering from this grave disorder in different parts of the United States who are entirely ignorant of the real nature of their malady and are being subjected to treatment for some skin or nervous affection of a very different character.

"One of the most distressing things about pellagra is the fact that it seems to be connected with an important food product which is almost universally used, the most important, in fact, of all the food productions of this country. Investigations made up to the present time seem to point very strongly toward the use of moldy or spoiled corn as the cause of this strange and most distressing disorder, and many confirmatory observations have been made in this country. It is evident, then, that in the use of corn care must be taken to make sure that the corn has been thoroughly dried and at no time has been exposed to conditions which would give an opportunity for the formation of mold.

"It is possible that the agitation of this subject may create a prejudice against the use of corn products in the minds of some, which will lessen the use of corn and the substitution of wheat, rice, and other cereals. It would seem, however, that such a prejudice is really baseless and that all the precaution necessary is to take care to see that the corn or preparation of corn used is of a very wholesome character."

While so much has been said and written about pellagra, and while so many eminent authorities are setting to work to bring about its prevention and cure, one source of danger, perhaps the greatest, has been strangely missed, declares the writer in *Good Health*:

"There is a constant source of pellagra which at the present time seems to have been overlooked; namely, beer. Most of the beer used in this country is made from corn, and it is quite reasonable to suppose that much corn which might be considered hardly suitable for the making of grits or cornmeal might be considered good enough for beer. It is doubtless true that there are at the present time many or even more people making use of corn in the form of beer than in any other form, and it would be well for such persons to know that in the use of beer they are running greater risk of taking pellagra than would be involved in the ordinary use of corn. In the use of beer, it would be impossible to tell anything about the condition of the corn from which the beer is made; whereas ordinary corn products may be easily inspected. If the discovery of pellagra has the effect to materially lessen the consumption of beer, it may be the means of accomplishing great good in the battle against intemperance."

## THE DETHRONEMENT OF STEAM

IN THE case of motor-driven vehicles on land, steam no longer holds its former position of preeminence. On the water, the swift motor-boat and even the larger launch and occasionally the torpedo-boat have adopted the internal-combustion engine by preference. Now this engine is to be tried on vessels of the size and capacity of the Atlantic liner, and we may soon see more than one huge ship where absence of funnels betrays complete divorce from the power of steam. The Hamburg-American line is building two 9,000-ton freighters to be driven by the only type of combustion-engine that is not an explosion-motor; namely, the Diesel. Crude petroleum will be employed as the working substance and a contract has already been made with The Standard Oil Company, we are informed by *The Marine Review* (Cleveland, September), for an adequate supply of liquid fuel. Says this paper:

"The enormous saving of space both below and on deck will be of material moment to a freight-carrier of the type it has been decided to build. . . . One immediate advantage is the economy, amounting to 75 per cent., which will be effected in engine-room space, thus giving so much the more cargo accommodation. Another economy is the smallness of the engine-room staff, only three engineers and three boilers being required for both motors in watches of eight hours each. For fuel, petroleum residue will be employed. In Germany, it can be bought for \$2 per ton, and in America—one of the terminals of the voyage—it is considerably cheaper. The whole cost is considered to be about 75 per cent. less than coal. The vessel's screws are somewhat smaller than those usually allotted to craft of 9,000 tons, . . . but it is expected that a speed of about 12½ knots will be obtained. While ordinary steamers can convert only about 16 per cent. of fuel consumed into energy, a motor-driven vessel converts 30 per cent. The new steamer, which will be completed in twelve or fourteen months, is intended for the Hamburg and New York and Philadelphia trade.

"The engines will be rather similar in appearance to the ordinary vertical steam-engines. The gear is most simple, the valves being operated by a few very short levers. Every valve can be changed in a couple of minutes, and all parts are as easily accessible as can be desired.

"The simplicity of the reversing gear can never be matched by a steam-engine. Regulation of revolutions and reversing will be done by a small hand wheel. The propeller, of course, is coupled directly with the engine, thus insuring easy handling, the same as with steam-engines. . . . The engine-room of the vessel will present quite a novel aspect, the more so as the auxiliary engines will also show the latest improvements of technical progress. The absence of funnels will even externally point out the novelty of this new type of vessel, which is to be built entirely, hull and engines, by the Germans.

"The enormous impetus that it is expected will be given to the development of oil fuel as a motive power for large steamers will have far-reaching results in the near future. The experiment will undoubtedly be watched with the keenest interest the world over."

In an interview published in the *New York Tribune* (September 18), Emil L. Boas, resident director and general manager of the Hamburg-American Line, is quoted as saying of the new departure:

"The propulsion by petroleum in engines of internal combustion . . . is by no means an experiment. The development of the Diesel engine is perfect now, and we will use them on the two new freighters. These vessels will not be hampered by coal-bunkers or stokers. The fluid fuel will be stowed away economically in various places, and there will be no smoke. This will give the ships unusually large cargo space.

"The vessels will be driven by twin screws, propelled by Diesel engines of 15,000 horse-power. They will have a speed of 12 knots, and there will be no danger whatever in handling them. The automobile has proved the safety of the internal-combustion engine. There will be no more danger traveling on one of these ships than there is in traveling about the



country in a modern touring-car. We will be able to send ships of this type from Hamburg to Asia in from five to six weeks without having them stop for fuel."

## FEAR OF THE HOSPITAL

IN CITIES and large towns the hospital is now generally recognized, at least among educated persons, as a useful public institution, the natural place of resort in severe illness or in case an operation is to be performed. It is understood that care and skilled attention are possible there, far better than what could be given to the patient at his own home. Yet beyond the radius of influence of one of these modern houses of rest and cure, the old unreasoning fear of the hospital still remains—a relic of the days when limbs were amputated without anesthetics amid unsanitary surroundings. Moreover, it is often felt that to be sent to a hospital is in some degree a disgrace. The causes of this feeling and the remedies for it were recently discussed by Dr. A. H. Thayer, in a paper read before the Albany County (N. Y.) Medical Society. We quote from a reprint in *The International Hospital Record* (Detroit, September). Says Dr. Thayer:

"The question naturally arises is this fear a reasonable one or does it come from the fact that when a patient from any of the small villages goes to a hospital it is the 'talk of the town'? Should that patient die while in the hospital every one in the village knows about it and talks about it much more than they would had he died in his own home. 'He died in the hospital.' The question does not occur to them, did he undergo an operation, or did he die of some condition that had already progressed so far that no operation could be performed? The fact to them is, 'He was taken to the hospital and died there, and I am not going there to die.' The same thought is many times expressed as follows, 'They took him to the hospital and operated on him and that killed him.' Of course it is considered that the operation was the direct cause of death, even in the case of an inoperable carcinoma in which an exploratory was done without perceptible effect on the patient's strength and it was the original disease that eventually caused the death.

"This is an argument against doing ever so slight an operation on a hopeless case. If the patient dies, other people hear of it and fear a necessary operation, no matter how simple it may be or how free from danger. In the minds of the public, all operations are serious and most patients are supposed to die who undergo them. . . .

"Among city people, or people who are frequently about the hospital, there is much less fear of an operation. They see the ninety-nine cases that regain their health as well as hear of the one that died.

"Is the time ever coming when the public will know that it is seldom the operation of itself that causes death? The cause of most cases of death is the fact that the disease has been allowed to progress too far before they will consent to an operation. Had the operation not been delayed because of needless fear until the patient or his friends could see that the patient would surely die unless operated upon, then operations

could be performed with a much lower mortality and with much better prospects of the patient regaining perfect health."

From an examination of the records of his own hospital, which he believes well represents the average, Dr. Thayer finds that the mortality rate following operation is low—not higher than 5 per cent. The fear of the hospital on this score is therefore not justified, and it should be remembered that if all the hospital operations had been performed at the patient's own homes, without hospital facilities and hospital comforts, the mortality would undoubtedly have been far greater.

## HYGIENE IN EUROPEAN SCHOOLS

THE MOST astonishing neglect of hygiene prevailed in the schools of Europe up to a few years ago, declares Mr. H. Rousset, a well-informed writer, in *Cosmos* (Paris). Not one of its most elementary teachings was followed, he declares. In the primary schools, for example, "the position assumed by pupils at work was, to be sure, somewhat less inconvenient than that of the scribes of the Pharaonic epoch, but quite as unreasonable." Large and small scholars were forced to sit on the same bench, at the expense of the most dangerous contortions. The inevitable results were near-sightedness and deformity. Moreover:

"From the standpoint of prophylaxis against contagion, there was the same indifference and the same danger; not only is the child more frail than the adult, and consequently more exposed, but when assembled in large numbers, pupils should be surrounded with more precaution than when separated, the causes of contagion being more numerous. It may be added that instruction in hygiene, especially if it consists, not of lessons painfully committed to memory, but of care always observed and sanitary habits gradually acquired, is of the highest social importance; when grown up the child will continue to live according to hygienic principles.

"Thus, for several years past, educators and physicians have been everywhere devoting themselves to the study of school hygiene. . . . Passing over the question of formal instruction, . . . we may make a distinction between different applications of the subject—the construction of furniture, the disposition of classrooms and of school apparatus, and the care taken and exercises taught in the domain of physical culture."

In the first place, Mr. Rousset goes on to say, the construction of school-buildings has made great progress, the study of decorative features having largely given way to that of simplicity, proper lighting, and the suppression of breeding-places for germs. Very wide stairways facilitate ingress and egress, and good heat and ventilation are assured by systems of central distribution. The classrooms are large, airy, well-lighted, and sometimes seem a little bare; they are decorated with wall-pictures, friezes, frescoes, etc., which in some French schools seem to have overshot the mark. Children of twelve, Mr. Rousset remarks, care little for Egyptian interiors. As for



THAT HE WHO STANDS MAY READ.  
One of the extension desks that are now being used in some European schools to enable students to sit or stand at their work.