

kind enough to accompany me and my friend Mr. Howard Fox, of Falmouth, in our expedition. Mr. Hill mentioned to me at the time that he had a curious specimen of a bird that had been caught by an oyster. The bird and oyster had been mounted in a case by Mr. Vingor, of Penzance. I have received from Mr. Hill a photograph of the event, which I have since had engraved. The history is that a woman who sells oysters went one morning to the Helford River and found the bird—a common rail—quite dead, with its beak held quite firmly by the oyster, which was still alive.

"The bird in all probability was wandering along the foreshore, looking for his dinner, and the oyster—possibly left longer by the tide than usual—was opening his shells waiting the incoming water. The hungry rail, seeing something that looked like a white and dainty bit of food, pecked at the body of the oyster, and probably pricked him sharply with his beak. The oyster then snapped his shells together as quick as a rat trap, and the poor bird instantly became a prisoner to die (or possibly get drowned as the tide rose) in his prison."

Domestic.

AN IMPORTANT QUESTION—HOW DO YOU SLEEP?

One of the most important things to know about any man upon whom you are going to place any dependence, is how he sleeps. Sleeplessness may sometimes be involuntary. There may have been some shock to the man's nerves which has made him insomnolent; but sleeplessness is more frequently voluntary. Men choose to push their studies or their work into those hours when they should sleep. It does not matter for what cause any man may do this, the mere fact of not sleeping spoils his case. He may spend his nights in the theatre, in the study, or in the "protracted meeting." It will make no difference; the result to the body will be the same. The sleep was not had, and for that the man must pay.

One man may do with a little less sleep than another; but, as a general rule, if you want a clerk, a lieutenant, a lawyer, a physician, a legislator, a judge, a president or a pastor, do not trust your interests to any man that does not take eight good solid hours of sleep out of every 24. Whatever may be his reason for it, if he does not give himself that, he will snap some time just when you want him to be strong.

The intellectual and moral connections of sleeping have, I think, not been sufficiently appreciated. Men and boys have been praised for "burning the midnight oil." Now this "midnight oil" is a delusion and a snare. The student who is fast asleep at 11 o'clock every night, and wide awake every morning at 7 o'clock, is going to surpass another student of the same intellectual ability who goes to bed after 12 and rises before 5. In sleep, the plate on which the picture is to be taken is receiving its chemical preparation; and it is plain that that which is the best prepared will take the best picture.

Men who are the fastest asleep when they are asleep, are the widest awake when they are awake.

Great workers must be great resters.

Every man who has clerks in his employ ought to know what their sleeping habits are. The young man who is up till 2, 3 and 4 o'clock in the morning, and must put in his appearance at the bank or store by 9 or 10 o'clock, and work all day, cannot repeat this process many days without a certain shakiness coming into his system, which he will endeavor to steady by some delusive stimulus. It is in this way that many a young man begins his course to ruin. He need not necessarily have been in bad company. He has lost his sleep; and losing sleep is losing strength and grace.—REV. DR. DEEMS.

THE TAPE WORM.

Most of my readers know that the domestic pig is subject to a disease known as "measles," in which the muscles are more or less filled with *cysts*, which render the pork unfit for food; but I think few are acquainted with its cause.

Man, it is well known, is occasionally infested by a parasite—the so-called "tape worm" (*Tænia solium*)—which may be described as having a tape-like body of varying length, with a differentiated "head" or *scolex* at one extremity.

This apparently single animal is in reality a colony of mothers and daughters, the scolex being the parent of all.

This "head" is provided with a *rostellum*, or, as it might

be called, proboscis, encircled by a crown of hooks, below which are the suckers; each segment added to the scolex is a complete individual containing a complicated and perfect reproductive system.

The last segment—*proglottides*—which are filled with eggs, break off at intervals and either the eggs are set free within the intestine of their host, when they are passed out with their feces, or the segments themselves are evacuated.

The tape worm feeds on the juices of the bowel by absorbing the nutriment through its skin, and does not appear to seriously inconvenience its host in any way. In Abyssinia *Tænia helminthosis* is constant and general; indeed the animal is there regarded as a sort of hygienic agent and cultivated rather than discouraged, yet the people are healthy; certain it is also that wild animals, almost without exception, harbor at least one species of tape worms as a natural condition.

But what has this to do with "measles?" Now to the point. Let us suppose one of the before-mentioned eggs taken into the stomach of a pig, either by its eating the excrement of a person affected or through the water or air; here it hatches, not into a tape worm, but into an animal of oval form, transparent, contractile, in the middle of which are six stylets arranged in pairs; with these it cuts its way through the tissues until the muscles are reached, when, having arrived at its destination, it stops burrowing and surrounds itself with a sheath.

Here the stylets atrophy, a new and different crown of hooks is produced, and the parasite becomes a *cysticercus* or vesicular worm, the cyst being about the size of a hazel nut. This constitutes "measles;" the exhaustion or even death attendant on the disease is caused by the scores, hundreds, or even thousands of animals boring through the tissues; once encysted there is no further suffering or danger.

The *cysticercus* remains encysted for months or years, or until the piece of flesh enveloping it is introduced into the stomach of man, in which case it instantly quits its torpid condition leaves its sheath, makes its way to the intestine, where, attaching itself by its suckers and hooks, it grows—or rather reproduces—so rapidly that in a few weeks a tape worm of several yards in length is formed, which reproduces eggs, and so *ad infinitum*—from pig to man, from man to pig.

Should the eggs be introduced into man itself or animal other than the hog, the *cysticercus* penetrates the tissues in the same manner, but it is "not at home," and instead of resting in the muscles it makes its way to other organs, such as the brain, heart, or eye, where its presence has caused in man several instances of insanity or death. Should a piece of meat containing a vesicular worm be eaten by a pig or animal other than man a *Tænia* is developed, but it also is "not at home," and does not attain its full development.

Both eggs and *cysticerci* are killed by a temperature of 200° Fah., so there is no danger in eating well-cooked pork, even if it contains *cysticerci*.

To prevent hogs contracting "measles" it is only necessary to prevent them having access, either through their food or water, to the secretions of man, and they will not suffer.

Throughout the genus *Tænia* we find this dual life; for instance, the cat has a tape worm, the *cysticercus* of which she gets from the mouse, and the dog, one which he obtains from the sheep.—*Scientific American*.

A CHARACTERISTIC OF AMERICAN LIFE.

In the summer of 1836 a barefooted boy was on his way to Honesdale, Pa., walking the tow-path of the Delaware and Hudson Canal. When four miles from Port Jervis, and still forty miles from his destination, he was overtaken by a canal boat. He was asked to jump aboard the boat and ride, which he did. On the boat was a Scotch family, just landed in America, who were on their way to the Pennsylvania coal fields. One of its members was a boy the same age of the young pedestrian, eleven years. A strong friendship grew up between the two boys by the time they reached Honesdale. The Scotch family went on to Carbondale, the center of the Lackawanna coal field. The boy who had been given the ride in the boat obtained employment on the Canal. His friend, the Scotch boy, worked in the mines for a short time as mule boy. Both he and the former barefoot boy rose in the company's service. The Scotch boy of forty-six years ago is Thomas Dickson, President of the Delaware and Hudson Canal Company. His friend, the other boy, is Col. F. Young, General Manager of the company, and President of its Albany and Susquehanna Railroad system.—*N. Y. Sun*.