## 160w Worry Tkills.

Jan. 6, 1900

An interesting article has appeared in the *Saturday Evening Post*, a Philadelphia paper, entitled "How Worry Kills," by Dr. George W. Jacoby. In this age of nervous strain, it will be interesting to many, though, we fear, they will not benefit by it.

"Not only is it known that worry kills, but the most minute details of its murderous methods are familiar to modern scientists. Nor are the methods of the insidious foe too complex for the comprehension of the layman. It is a common belief of those who have made a special study of the science of brain diseases, that hundreds of deaths attributed to other causes each year are due simply to worry.

"In plain, untechnical language, worry works its irreparable injury through certain cells of the brain, and that delicate mechanism being the nutritive centre of the body, the other organs become gradually affected. Thus some disease of these organs or a combination of organic maladies arising, death finally ensues.

"The insidious inroads upon the system of this quiet destroyer can be best likened to the constant falling of a drop of water in one spot—the incessant drip that finally wears away the rock. In the brain it is the insistent, never-lost idea, the single, constant thought, centred upon one subject, which in the course of time destroys the brain cells that are the engineers and pilots, so to speak, of the human craft, and from which the powers of mentality, action, and health are directed unerringly.

"Worry in the form of irritation at certain points produces little or no injury if infrequent, but continued without cessation brings with it physical dissolution just as surely as the bullet sped from a gun to a vital part. The healthy brain can cope with occasional worry; it is the iteration and reiteration of a disquieting thought which the cells of the brain cannot successfully combat.

"The mechanical effect of worry is much the same as if the skull were laid bare and the brain exposed to the action of a little hammer beating continually upon it day after day, until the membranes are disintegrated and the normal functions disabled. The maddening thought that will not be downed, the haunting, ever present idea that is not, or cannot be, banished by a supreme effort of the will, is the theoretical hammer which diminishes the vitality of the sensitive nerve organisms, the minuteness of which makes them visible to the eye only under a powerful microscope. " It is well known that the person who becomes ill from worrying over one thing permits the subject of his worry to absorb his thoughts to the exclusion of all other interests, bringing into continual play one set of nerve cells. It is the same as if a man used one muscle or set of muscles continuusly, only the effect of the nerve cells is far worse. That is why the brain will wear out far more quickly under worry than under work. Under work there is an attenuation of exercises and repose.

"There must be a judicious alternation between the two. All parts of the brain must be exercised and then allowed to rest. The cells affected by worry are those in that portion of the brain that preside over the intellect, the cortex of the frontal lobes, which is directly under the upper part of the forehead, where the hair begins to grow, or perhaps a trifle higher than that.

"Now, the cells are intimately connected, joined together by little fibres, and they in turn are in close relationship with the cells of the other parts of the brain. Thus if one part of the mind wears out one set of cells, all the mind, and eventually all the body, is affected.

"The effect on these nerves is a purely chemical one. In consequence, what are known as 'fatigue products' are formed in the cells. These are poisons, and the German scientists call them 'Ermudung Stoffes.'

"Under normal conditions—that is, when they are the result of work and not worry—these venomous 'fatigue products' are thrown off even by the cells themselves during rest and relaxation. These 'products' produce direct microscopic changes in the nerve cells, and the theory is that if they are quickly thrown off the cell returns to its normal condition; but if left there by the cells, being unable to perform its proper functions, the poison becomes fixed.

"While it is impossible to obtain evidence of mental fatigue in the brain of an animal, and the nervous cells of the brain of a man cannot be examined under the microscope after he has been exerting himself mentally, the supposition is that mental fatigue in the human brain produces marked changes. The nutrition of the body being dependent upon the normal action of the brain, the inactive cellular glands filled with poison become decadent and lose their vitality, affecting in the same way all the other brain cells.

"Being in direct communication with all the other organs of the body, some of which may be imperfectly nurtured, the result is that the latter fall into some sort of local disease. The victim loses his appetite or cannot assimilate his food; complications follow, and the man or woman dies. His death is ascribed to the local disease, but



