

lives. My dreams are usually fragmentary and fugitive, shadowy and colorless. But once when I took laudanum there was unveiled before me a series of the most wonderful pictures, minute and sharp as the landscape seen through the big end of an opera-glass, and as brilliantly colored as a Chinese rice-paper sketch. It was an unprecedented experience for me and I realized for the first time what delight are enjoyed by the favored few who have colored dreams naturally.

De Quincey in his "Confessions" and Baudelaire in his "Hymn to Opium" depict in the most glowing terms that English and French afford the delights of the opium dream. But those who seek an artificial paradise by way of the alkaloids find ultimately that they have jumped out of ennui into anguish. De Quincey soon found himself chased by Chinese, kissed by cancerous crocodiles, and suffering other forms of alliterative torment.

Opium and hashish in the Orient, alcohol and cocaine in the Occident, have been from time immemorial the favorite means of escaping from this dull world into the dreamland of Euphoria. Hashish also intensifies color perception and excites chromatic dreams. I knew a lady who was accustomed to take a pinhead pill of hashish gum before going to the theater because it brightened the scene and converted the painted back-drop into a spacious landscape.

The internally secreted hormones are similar in potency and effect to the externally administered alkaloids. An overdose of insulin, a hormone secreted by the pancreas, causes feelings of "causeless" fear, followed by trembling and finally collapse. The patient can recover his courage by sucking a stick of candy. An excess of activity on the part of the thyroid gland excites anxiety and irritability.

Possibly anxiety and terror dreams in general may be caused by some disturbance in the balance of the hormones or similar organic derangement rather than by anything peculiarly unpleasant in one's past experiences or present predicament.

Certain foods are reputed to produce bad dreams, but this is uncertain. I have often been warned against eating mince pie or Welsh rabbit before bedtime, but when I tried the experiment I saw neither hair nor hoof of a nightmare. Nobody ever told me of any foods that would give pleasant dreams. I wonder why. Aren't there any? But some day the chemist may give us synthetic dreams by his synthetic compounds and then shall our sleep always be happy and the nightmare shall be no more.

READING REFERENCE - Harrow, Benjamin. Glands in Health and Disease. New York, E. P. Dutton Co., 1922.

TO TEST ARTIFICIAL KIDNEY ON HUMAN BEING

An artificial kidney invented by Dr. John J. Abel, professor of pharmacology at the Medical School of Johns Hopkins University, is shortly to be tested on human beings according to word received by him from a German scientist. Before Dr. Abel's discovery could be applied at the Johns Hopkins Hospital the war broke out and disorganized the source of supply of hirudin, an extract from Hungarian leeches necessary to the operation of the artificial kidney.

Dr. Abel's researches resulted in the discovery of the pure principle of adrenalin and recently he and his collaborators, Drs. Chas. A. Rouiller and E.M.K. Geiling, have isolated a very powerfully acting hormone from the pituitary gland, an organ controlling the functions of growth.

To the uninitiated eye the artificial kidney looks very much as though it had been built after the general design of a steam boiler but in reality it is made in imitation of the filtering mechanism in the kidneys of higher animals which is known as the glomerulus. On the interior of the artificial kidney are tubes of celloidin, a substance that lets the impurities and poisons strain through but retains in the blood the vital corpuscles and proteins. The leech extract, hirudin, is used to keep the blood from clotting as it flows through the tubes.

The apparatus is attached outside the body to an artery and the blood flows back again to another connection further along on the artery or to a vein. Any filterable constituent of the blood which must not be removed, such as blood sugar, is prevented from escaping through the walls of the celloidin tubes by the fact that they are submerged in a solution that contains the same amount of this substance as the blood.

Already the kidney has been tested on dogs with the result that it was found to operate so rapidly and efficiently that the living kidneys did not secrete and were relieved of their work so they could rest. The hope of applying it to the relief of human sufferings lies chiefly in the field of cases where the kidneys break down in fatal cases as acute nephritis, scarlet fever, corrosive sublimate poisoning and similar toxic states. In many instances the life of the patient probably could be saved if his inflamed kidneys were given a few hours rest each day by artificial means.

RAILROAD WHISTLES MAKE CROSSINGS MORE DANGEROUS

Crossings are rendered deadly and millions of dollars worth of steam are wasted annually by whistles now used on leading railroads in this country, Prof. Arthur L. Foley of Indiana University has reported to the Indiana Academy of Science. Changing the location of the whistles on the engine and raising their pitch were advocated to save lives and money.

Whistles are placed behind the smoke stack and dome for convenience only, with no thought of the possible connection between the whistle's location and its efficiency in doing the only thing it is expected to do - to make as much noise as possible along the track ahead of the locomotive, and as little as possible in the directions where it is not only not needed but is usually a nuisance, Professor Foley said, in pointing out that the whistle should be placed in front of the smokestack and have a reflector behind it.

Every time the ordinary locomotive whistle is blown it uses the steam produced by two pounds of coal and he estimates that the ordinary locomotive wastes 36 pounds of coal and 140 pounds of water per hour in whistling. As there are 65,000 locomotives on Class A railroads alone, the cost of blowing whistles runs into millions.

Most of these whistles, Prof. Foley claimed, are from one to two octaves too low in pitch to be heard to the best advantage by the average ear. Raising the