

# LANCASTER ENTERPRISE

LANCASTER, S. C., WEDNESDAY, MARCH 30, 1898.

## THAT CURES

Are now at your service. Diseases incurable now treated and cured by invalid applying is guaranteed attention of Dr. Cowden. Most modern, scientific and curative methods in the world. Thousands cured.

Dr. J. M. Cowden has enjoyed the reputation of a physician in the City of Washington. This is not a popular fad, but it is altogether dependent upon hard study and research. He personally consults over two hundred patients every day. He treats the results are almost miraculous. His specialties are:  
Bowel, Blood, Deafness, Consumption, Rheumatism, Scurvy, Asthma, Cataract.  
I will send a short, readable article, explaining Doctor and treatment of disease. This is of great value to all, and of interest to those who are well.  
CONSULTATION FREE. WRITE TO HIM.  
COWDEN, M. D., 715 13th St. N.W., Washington, D.C.  
Dr. Cowden's work of advice to all men, young, middle-aged and old, are worth their weight in gold, and can be had for the asking.

## IT UP-TO-DATE!

Goods filled from any catalogue promptly and at prices frequently less and never beyond than quoted.  
We guarantee all goods to be just as represented and should at any time an article bought from us not prove satisfactory to the purchaser a new one will be substituted on its return to R. Brandt.

Many years of honest dealing is that feature of our business which has made for us such a Sterling Reputation in every part of the State.

All kinds of Watch and Jewelry Repairing at low prices and return all jobs looking like new. Our shop equipments are unsurpassed.

**BRANDT, The Jeweler and Optician,**  
Chestnut Street, CHESTER, S. C.

## THINKING IS DONE.

### THEORY OF THE BRAIN'S MODERATION OF WORKING.

Brain Cells that Operate on the Principle of a Great Telephone Exchange with Nerves for Wires and Functions of Sleep.

It is found, further, that if an animal whose brain cells are thus exhausted is permitted to rest and to sleep, its cells rapidly recuperate, new material being supplied from the blood until the vacuolation has disappeared and the cell is practically as good as new again. This explains why sleep is necessary to our existence. During waking hours our brains are literally worn away, and sleep is the state during which the repair shops of the brain make good the damage of the waking hours. Thus the brain of a person who suffers from insomnia is in the condition of a locomotive which runs night and day without going to the repair shops; disaster must ultimately result.

It is not sleep, however, but the fact that the brain cells are exhausted and need to be repaired. The celebrated Cabanis had the matter offhand by saying that the brain secretes thought and the liver secretes bile. This saying passed into common use until it was recognized as a clever speech rather than an explanation of the mystery. However, the most recent researches of the microscopist make it appear that the saying is not so correct, but that, correctly in some measure, it is not so. Of course, the brain is not so intangible, is not so dry, and substance, but the processes which produce thought are comparable to the liver and the stomach produce the food.

British physicians, have been attracted to this theory, and their researches have shown that the brain cells are exhausted and need to be repaired. The celebrated Cabanis had the matter offhand by saying that the brain secretes thought and the liver secretes bile. This saying passed into common use until it was recognized as a clever speech rather than an explanation of the mystery. However, the most recent researches of the microscopist make it appear that the saying is not so correct, but that, correctly in some measure, it is not so. Of course, the brain is not so intangible, is not so dry, and substance, but the processes which produce thought are comparable to the liver and the stomach produce the food.

of investigators on the Continent, let us see a long way into the intricacies of the brain. It is shown unequivocally, for example, that a brain cell, which is the really important part of the brain, actually loses part of its substance during action. The brain cells of persons and of animals that have died during a period of great exhaustion from over-exertion are found to be greatly changed from the condition of the normal cell during times of health and vigor. The cell of the exhausted brain, instead of being plump and full of nervous matter, is found to be hollowed out or "vacuolated," a cavity within its substance having formed and being filled with water. This means that a part of the cell substance has been actually consumed during the time of brain activity, precisely as coal is consumed when one gets heat from a furnace.

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whole. But not all parts of the brain are involved in any one kind of mental effort. The blood supply of the brain is so arranged that by expansion or contraction of different arteries parts of the brain may be flushed with blood and other parts dammed off, so to speak, somewhat as the various currents of an irrigated field are regulated by the gardener. And as rapid flow of blood is essential to great mental activity, this means that one part of the brain may be very actively at work while another part is resting and recuperating. Thus it is that a person suffering from brain fatigue may leave his desk and go out into the fields with a golf stick, or on the highways with a bicycle, and, by diverting his mind, give the overworked cells a chance to rest and recuperate. But it must not be overlooked that such exercise involves other brain cells, which, in turn, become exhausted, and that, in the end, for the recuperation of the brain as a whole, sleep is absolutely essential. No recreation, no medicine, no stimulant will take its place. The man who does not give himself sufficient hours to sleep, or is unable to sleep when he makes the effort, is literally burning away his brain substance and can no more keep on indefinitely in this way than a locomotive can run on indefinitely without getting fresh supplies of fuel.

In this new view it appears that each brain cell is a sort of storage battery, which can perform a certain amount of work and then must be recharged. This likeness to a battery is further emphasized by the fact that the nature of the brain's cell work consists, like that of any other battery, of the sending out of charges of energy along connecting wires, or, at least, along fibres that may be likened to wires. Brain cells when examined under the microscope, are found not to be simple globular bodies, like many other kinds of cells. On the contrary, they are irregular in shape and when properly stained, little wire-like fibres can be seen jutting out from them in various directions. It is along these fibres that messages come to the cell, and other messages are sent out, much as messages go and come from a telephone central office.

This likening of the brain to a telephone central office is a comparison that may be carried to a remarkable length. Indeed, no other comparison serves so well to give one a correct notion of the method of brain action. But until recently there was one phase of the matter that could not be explained. How is it that the various messages that are surging through the brain are directed to proper channels among these multitudinous wires? When you call up the central office you give a certain number, and the operator connects your particular wire to that number. When you are through talking the operator breaks the circuit, and you can no longer communicate along that line. But is there anything similar to this making and breaking of currents possible in the brain? Astonishing as it may seem, the answer is yes. There is precisely such a series of changes in the circuit of the brain cells as is effected by the operator with the telephone wires.

The manner of it is this. Recent studies of the brain cell, particularly those made by the Spanish physiologist, Ramon Cajal have shown that many wires which lead out from a cell do not go on uninterruptedly to a termination in some other distant cell,

as they were formerly supposed to do, but instead terminate in "blind ends." That is to say, they point out toward other cells, but do not reach them. Such a fibre clearly cannot convey any message, because, like a telephone wire that has been cut, it does not lead anywhere. But under certain conditions of stimulation a very extraordinary thing happens. The "blind" fibre, under stimulus from its central cell lengthens out until it touches a fibre of a neighboring cell, and presto, with such contact, a circuit is completed and a message flashes between the cells. Manifestly such coming together of the "blinds" is precisely comparable to the operator's connecting your telephone with another. And as in the case of the telephone, so in the case of the cells, when the communication is broken, the fibres retract and cease to touch one another, and no further message can be sent.

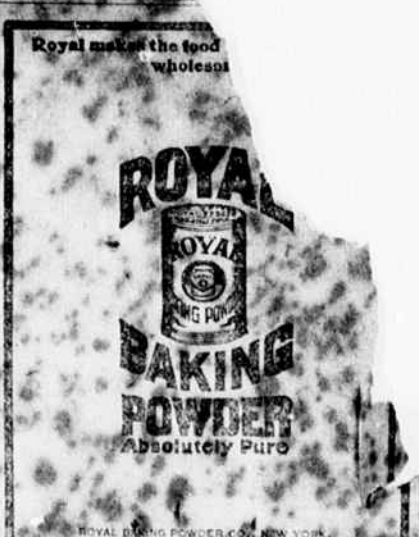
Sometimes the telephone girl does not understand your order, or reports that the number you wish is "engaged," and you cannot send your message. Similarly, in the brain, it seems sometimes as if certain circuits one wishes to use are engaged in other channels; for how often does one "fuzzle his brains" to recall a fact or a name, which he feels that he knows perfectly, but which will not come at an instant. And then how, perhaps hours afterward, the elusive name will flash before him, as if the telephone girl of his brain cell had at last succeeded in getting the right connection. When one reflects that each of these wonderful brain cells is microscopic in size, requiring, indeed, a high power of the microscope to make it visible, and that there are billions of them in a cubic inch of brain substance, one is led to wonder that such mistakes of connection or failures to connect do not occur oftener. As it is in the telephone office of the brain, so in the most wonderful structure of which we have any knowledge, the most delicate piece of mechanism ever devised by human hands is a crude thing compared with the marvelous brain cell.

In the time of war it often happens that the telegraph wires and batteries at the central offices, so that telegraphic and telephonic communication becomes impossible. A precisely similar destruction of brain fibres and brain cells occurs under certain conditions of disease. The familiar disease, paresis, for example, consists essentially of just such a destruction of the brain structures as this. Day by day, in the paralytic's brain, disease is making inroads upon the delicate mechanism of the cells, and, correspondingly, the ideas that could alone result from the activities of those cells are annulled forever. When such destruction has gone far, involving many sets of cells, it is impossible that the paralytic's mind should act normally as that a telephone system should operate with lines cut and batteries destroyed.

It is a great leap from the old-fashioned doses of blue-mass and nauseous physics to the pleasant little pills known as DeWitt's Little Early-Risers. They cure constipation, sick headache and biliousness. Crawford Bros.

The careful perusal of Mr. Wm. Ganson's new advertisement will disclose the fact that he is offering to spring buyers some rare bargains in hats, dress goods, etc. "Come expecting great things you won't be disappointed." is the invitation extended by him.

Thirty-five years make a generation. That is how long Adolph Fisher, of Zanesville, O., suffered from piles. He was cured by using three boxes of DeWitt's Witch Hazel Salve. Crawford Bros.



### What Lancaster County Boys are Doing in S. C. College.

The reports of the class standing of the students of the South Carolina College, for the second term, has been sent out. The following is a list of those who appeared on the roll of honor from this county:

- SENIOR CLASS OF LAW DEPARTMENT.
  - Charles D. Jones, senior law, proficient; Junior law, proficient.
- SENIOR CLASS, ACADEMIC DEPARTMENT.
  - D. R. Williams, geology, proficient; Logic, ethics, third history and pedagogics, distinguished; political economy, highly distinguished.
- JUNIOR CLASS.
  - J. C. Foster, physiology, proficient.
- SOPHOMORE CLASS.
  - C. A. Foster; history and mathematics, proficient.
- SPECIAL STUDENTS.
  - J. H. Connors; Latin, proficient.

### Mules, Hides and Horses in South.

Just received two car loads young Kentucky Mules and Hides of which are new. All p. in South counties wanting m. horses, either for cash or for paper, would do well to come before buying. They must be come and see us if you wish save money.

### THE KERSEAW BANKING COMPANY.

A torpid liver robs you and ruins your health. The Early-Risers cleanse the constipation and all stomach troubles. Crawford Bros.

Shanno-Funderburk, vites the attention of the of the ENTERPRISE this w their handsome stock goods consisting of ladies goods, hats, shirts. Give them a call.

Shake Into Your Stomach DeWitt's Little Early-Risers. Men's Post-Office, a powerful laxative and stomachic, and a great remedy for the constipation of the old. A man's health is a new man's test case. It is a great remedy for the constipation of the old. A man's health is a new man's test case. It is a great remedy for the constipation of the old. A man's health is a new man's test case.



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