

What Will His Brain Reveal?

Dr. Simms, the Brain Specialist and Student of Physiognomy, Dies and Leaves His Skull and Its Contents to His Fellow Brain Specialists to Dissect and Study Under the Microscope

SCIENCE understands fairly well the working of the machinery of the human body so far as heart, lungs, stomach, kidneys and most of the other important organs are concerned.

But inside the bony shell of the skull is the noblest and the most mysterious of all—the brain. Unfortunately, science knows very little about the brain; the most important of all the organs of the human body.

From the earliest time the brain has been the subject of interest to mankind. Savages realized the importance of the brain and by observation arrived at many crude but fairly accurate guesses as to the simpler functions of the brain. Of late years specialists have spent their lives trying to solve the mysteries of the brain.

Dr. Joseph Simms, one of the oldest students of the mysteries of the brain, died the other day in New York and bequeathed his head and the contents thereof to his fellow brain specialists. Dr. Simms was eighty-seven years old and for seventy years he had focussed his mind on the brain and the skull and the features of the human face.

Dr. Simms dated back to the earlier times when the study of the skull, known as phrenology, had a respectable scientific standing. But the advances of scientific experimentation showed that the bumps of the cranium might or might not have any relation to the peculiarities of the brain that lay underneath the skull.

Dr. Simms also was a student of the old pseudo-science of physiognomy, and believed that the eyes, the mouth, the nose, the ears—all of the features—had a direct relationship to the brain. He believed that the individual peculiarities of the human being were usually reflected in striking peculiarities of the features of the face.

Dr. Edward A. Spitzka, perhaps the foremost brain specialist in America, is the happy possessor of the skull and brain of his late friend, Dr. Joseph Simms. The newest and greatest treasure in Dr. Spitzka's New York laboratory is the brain of his old friend. Brains of miscellaneous corpses from the morgue are easy enough to obtain. But their previous history is usually unknown and they are seldom brains of highly cultivated persons. The special value of Dr. Simms's brain lies in the fact that he was not only a man of scholarly attainments, a man of rare culture, but he had specialized on this peculiar subject of the brain.

Never before has the brain specialist had the good fortune to get under his microscope the brain cells of such a subject. It will take not less than two years of intensive study to exhaust all the possibilities of examination of this brain. What will the two years' research into the late Dr. Simms's brain reveal to science?

Sixty years ago physiognomy flourished, and with it phrenology. Professors, both spurious and authentic, toured the countries of Europe and America, giving lectures and "readings." Learned bodies investigated, held lengthy discussions, gave out exhaustive reports. Treatises were written—didactic volumes setting forth just what qualities, emotions and faculties of the individual were shown by each cranial feature and projection of the skull. Lombroso combined physiognomy and phrenology and produced his famous theory of criminality. Dr. Simms lectured on physiognomy in the United States, Great Britain and Australia, and was elected to membership in scientific organizations of high standing. Darwin was getting ready to publish his "Origin of Species." Huxley had not yet "arrived." A few years later, when Huxley and Darwin were famous names, Dr. Simms ranked equally high in certain quarters.

And now physiognomy is a thing of the past. It is not recognized as a science. The library classification of what few books on the subject survive is under the heading "Occult Science"—that is, no science at all. Lombroso is discredited—curiously enough Dr. Spitzka was the foremost of his voracious opponents. Phrenology is considered only in a humorous light; the part of a phrenologist is played by the chief comedian in the revived "Florodora." Of physiognomists only the cousins, thrice removed, are left—vocational advisers, so called, who profess to tell from the shape of a man's nose whether he is best fitted for salesmanship or farming. The names of Lavater, Gall, Spurzheim, Simms mean nothing to the present generation.

Yet there is something in physiognomy—some basis of fact, however slight. Undoubtedly a person's way of thinking leaves its impress on his body, just as his way of living does. Most of us practise physiognomy, more or less unconsciously. We judge other people by their looks to a large extent. We do not expect to find the aesthetes in the gross, thick-lipped, big-nosed, heavily-jawed man, or the brain of a poet in the undershot, thick-jawed bull head. Whether we realize it or not, the size and shape of other people's features lead us to appraise their characters, sometimes to a serious degree. And our judgment is correct, very often.

Physiognomy was the attempt to standardize this habit of judging by looks. Human features vary and human faculties vary; there must be a direct association between features and faculties, the phys-

ionomist argued, and he attempted to show the connection. The movement was in line with the evolution of other sciences. Other sciences had their beginnings in wonder at natural phenomena, and so, probably, did physiognomy.

From the very inception of human consciousness, doubtless, there must have existed a feeling for physiognomy. The savage of the stone age gained his first impression of his fellows' characteristics from their looks. Experience verified his suspicion, and thereafter he came to look for similar qualities in beings with similar features. Successive generations followed the same practice until it became a human habit and eventually a science. So with other science. Early man noticed chemical changes and other phenomena and associated them with the supernatural; he was content with this explanation. His descendants tried to bring about these changes themselves, but believed that whatever success they had was due to supernatural agency—the alchemists, for example, who tried by means of magic charms and formulae to change base metals into gold. And from alchemy, with its combination of formulae and incantations, rose the pure chemistry that we know to-day.

So physiognomy followed the natural line of evolution. But it was an attempt to achieve the impossible. Chemicals are absolute substances. It is quite possible to analyze and classify and divide them until the final constituent elements are discovered, and then to prove the result by synthesis. Not so with human faculties. There is too much variation, too many and too fine subtleties. There is nothing absolute about the faculty of reasoning or the ability to perceive form or the desire for children or the power to gain wealth. There is nothing tangible or concrete about the qualities of courage or will. Yet the physiognomist attempted to show that the possession of these and other abstract qualities was evidenced in the concrete, that strength of purpose or the lack of it was shown beyond cavil by the shape and size of the nose; that the form of the lips betokened sensuousness or asceticism and so on. The phrenologist found the same evidence in the size and shape of the head and its protuberances. Both physiognomy and phrenology had a basis in fact, but both went too far.

Dr. Simms followed Lavater and Gall and Spurzheim in his system of physiognomy and introduced new theories. He took all the human faculties he could conceive of and classified them as related to the eye, nose, mouth, chin, ear, eyebrow and other parts of the face. He attempted to prove the correctness of his assumptions by showing the portraits of men known to possess certain faculties in remarkable degree. A musician with a huge nose, slightly hooked, or several such musicians, proved, so far as he was concerned, that any being with a big hooked nose was a natural musician. If the subject also possessed a weak chin or a receding forehead he might never get anywhere, might never use his musical talent enough to become known as its possessor, but, nevertheless, he had it. And, as no one could prove, under these conditions, that the most tone-deaf person was not innately a musical genius, Simms's theories were for a while unassailable.

Many and curious his theories of physiognomy were. In 1874 Dr. Simms published "Physiognomy Illustrated; or, Nature's Revelations of Character." A description of the mental, moral and volitive dispositions of mankind as manifested in the human form and countenance, a volume of six hundred pages with more than half as many illustrations. After an introduction, in which he traces the history of physiognomy from the earliest times and sets forth "the moral results of its cultivation," Dr. Simms classifies the forms of the human body—abdominal, thoracic, muscular and fibrous, osseous or bony, etc. Then he enumerates the human faculties and states the principles on which they are founded. Certain predominant forms of the body manifest certain mental powers or faculties, he argues, and proceeds to list and classify them.

When the abdominal form predominates, he says, the following qualities are apparent in the mind: Aquisquiveness, animal imitability, aquisquiveness, or the love of water; phycloplidity, or hope relating to bodily wants; graspativeness, or

love of gain; associative-ness, or desire of company; appetitiveness, or propensity to eat, and retaliativeness, or disposition to return like for like. And so on with the other bodily forms. For each of these qualities he lists the features symptomatic of its possession or lack. Aquasquibitiveness, for example, is shown by "a rounding or puffy fullness of the cheeks, from one-half to three-fourths of an inch outward, backward and slightly upward from the mouth that is part of the face where the love of liquid first manifests itself." Heavy jaws, large neck and heavy chest, he says, are signs of large capacity, and cites as proof the fact that the "conformation of the jaw are the means that nature has provided to man and the lower animal kingdom for grasping and retaining possession of their food, and therefore denotes the degree of the predatory proclivities of the individual," which is not confined to food alone.

"A long, prominent nose, which rises high from the face in its upper part, is the very best evidence of large moral courage," he says, in discussing the "protective abilities" which appertain to the thoracic form of body, and illustrates this contention with pictures of a professor of divinity and a pugilist—one of whom, of course, has an exceedingly long nose and the other hardly any. The nose that "stands far out from the face in the region of the bridge" is a certain sign of an aggressive nature, he says, because "the vicious, biting and kicking horse is almost invariably found to possess a nose of the bow shape" and "the same rule holds good in the human family."

The symptoms of self-esteem or conceit are the carrying of the head well back and relatively great length from the point of



Dr. Joseph Simms, the Brain Specialist who Bequeathed His Head for Scientific Examination.

An Interesting Model of the Nervous System of the Brain.

Curious Chart from the Late Dr. Joseph Simms's Book on Physiognomy.

No. 1—Charlemagne, though unable to write his own name, promoted schools, arts, civilization, and was the most powerful and enterprising monarch of his day. No. 2—James Boswell, the celebrated biographer of Dr. Samuel Johnson. He resembled Johnson as a fly does an elephant, while his face, like the face of an elephant, was rarely seen.

No. 3—Cinghalese, a gentleman from the mountains of Ceylon. No. 4—John Locke, a distinguished philosopher.

No. 5—Tasmanian, an aborigine of Tasmania. His head does not, while his face does, manifest his cruel and cannibal habits.

No. 6—Lord Byron, a poet of marvellous genius.

No. 7—Caesar, a famous Roman general described in Shakespeare's "Julius Caesar."

No. 8—Rev. Rowland Hill, an English clergyman.

No. 9—Lavater, an eloquent Swiss preacher, poet and physiognomist.

No. 10—Paul I., Emperor of Russia, as his feeble face indicates, was one of the weakest rulers in Europe.

inent nose—Dr. Simms shows a picture of Com-

modore Vanderbilt, and for the lack of this quality the likeness of a thin, dis-

posed being denominated "a squanderer."

Pictures of Mrs. Margaret Fuller Ossoli, who preferred to drown rather than leave her husband, and of Brigham Young, "the noted polygamist," are shown to prove the signs of "monogamy, the disposition to love one only," a round shape of the eyes opening being the "most unexceptionable evidence of large mating love." Mrs. Ossoli is shown with perfect circles for eyes and Brigham Young with mere peering slits, of course. Lizzie Smith, a notorious pick-

et pocket of New York, and William Tyndale, translator of the Bible and martyr, are shown side by side, one possessing all the physiognomical attributes of honesty and the other lacking them. And so on through the whole category of human sins and virtues, likes and dislikes, and even the pettiest foibles.

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So Dr. Spitzka is examining the brain of Dr. Simms, whose pseudo-science he helped displace. Physiognomists were not in the habit of analyzing their own countenances and there is no record that Dr. Simms did so. But Dr. Spitzka has known him for a long time and is familiar with his mental characteristics. Will the conclusions that might be reached by Dr. Simms's system agree with those of Dr. Spitzka after he has completed his examination? Would a "reading" of Dr. Simms's face show certain things which Dr. Spitzka's dissection of the brain will prove?

Or would the two methods collide? Will the results of the careful weighing and dissecting of Dr. Simms's brain show him to have possessed certain qualities which his friends in life knew he did not have? And would an examination of his features, by his own system, show that he had these qualities? If so, physiognomy would achieve one last triumph, would have dealt an exasperating blow to its victorious successor.

But if not—if the results of Dr. Spitzka's examination coincide with what was known of Dr. Simms—then the younger science will have completed its victory, whether the Simms physiognomy agreed or not. For cerebral morphology has already proven itself, and physiognomy, with phrenology and a host of other eologies, has passed into the realm of forgotten fads. But it will be interesting to see what the great opponent of physiognomy makes of the brain of its great proponent. What will Dr. Spitzka find?

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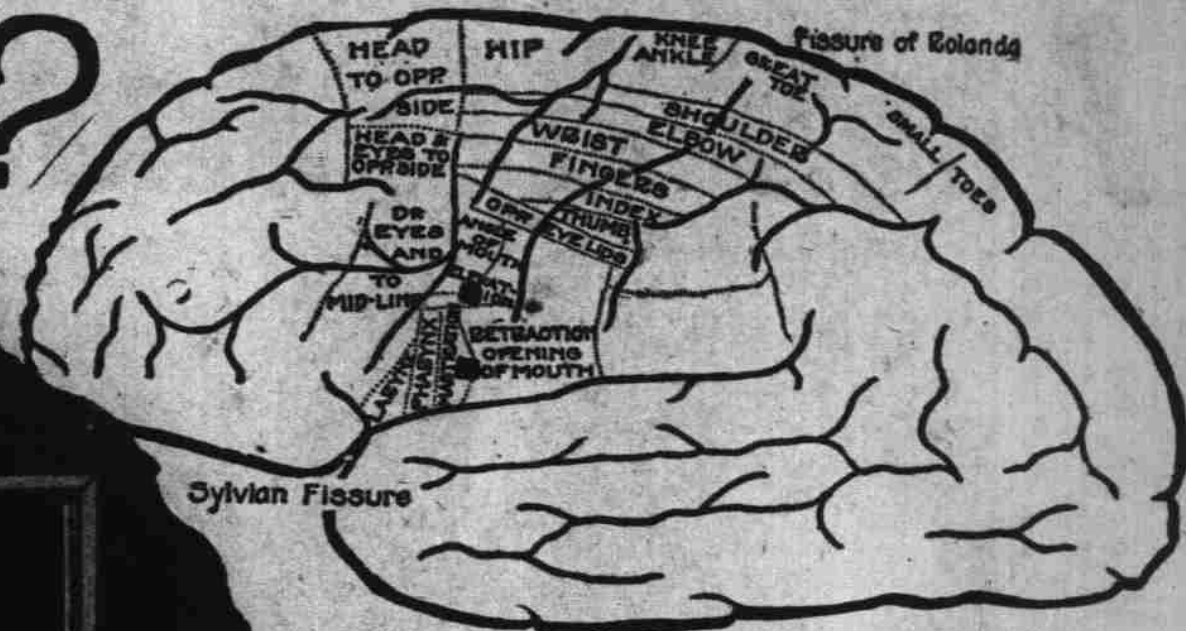
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The Motor Centres of the Brain Which Especially Interested the Late Dr. Simms Because They Were the Most Closely Associated With the Features of the Human Face—the Eyes, Nose, Ears, Mouth, etc.—Which Were Dr. Simms's Specialty.

The Ingenious Kallometer, or "Beauty Meter," Which Is Placed Upon the Face to Test the Symmetry of the Features and Their Beauty, Proportions or the Contrary.

The Brain of Laura Bridgman.

The Deaf, Dumb and Blind Girl who, Before the Days of Helen Keller, Astonished the Scientific World by Her Learning and Intelligence. Here the Convulsions of the Brain Are Deep and in Wide Folds. The Cellular Area Is Very Extensive and the Brain Itself Heavy. There Are in It Traces Very Strongly Marked of Undeveloped Areas. These Are Centres Directly Connected With Sight and Hearing. On the Other Hand, Portions of It, as Can Be Seen from the Photograph, Are Very Abnormally Developed. Compare With It the Beautifully Balanced Brain of Dr. Edward D. Cope.

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