

To Cut Apart these Interesting "Siamese Twins"



Another View of Madeleine and Suzanne Durand.

Queer "Who's Who" Problems of Little Madeleine and Suzanne Durand, United by Tissue and a Common Abdominal Cavity

Paris, Jan. 24. TWO little twins with only one abdomen between them are now exciting the interest of doctors and thoughtful people of Paris.

These twins are girls, Madeleine and Suzanne Durand by name. They are united by a band of flesh near the bottom of the breast bone. The abdominal cavities open into one another and are practically one.

The twins were born on November 28 and have developed satisfactorily up to the present. The leading French surgeons are now planning an operation to separate them, because the abnormal bond between them, rendering privacy and an individual life impossible, must otherwise make their existence a long tragedy.

Just imagine how you would feel if you were a girl joined to another, so that every illness that afflicted her must attack you and you could not even listen to your sweetheart's most impassioned words without the intrusion of a third person.

Dr. E. Le Filliatre, surgeon of the Central Prison Infirmary and member of the Academy of Medicine, has made a special study of the case and will take part in the proposed operation to separate the twins. He described the case to your correspondent.

"Madeleine and Suzanne," he said, "belong to the xiphopagus variety of twins. That means that they are joined together at a point above the stomach and below the thorax. The connecting link is a piece of very hard flesh of about twelve inches in circumference and four inches in thickness.

"An X-ray examination has shown that the lungs and the hearts of the twins are completely independent of one another. There are two oesophagi, two stomachs and two intestines, but the two abdominal cavities are in communication. A curious fact is that if Madeleine breathes in, while Suzanne is breathing out, Madeleine's small intestine passes into Suzanne's abdomen, and similarly Suzanne's small intestine passes into Madeleine's abdomen when the latter is breathing out. But if they both breathe in and out together, then the two intestines come into opposition and one cannot invade the other's territory.

"They are what a woman would call very nice babies, and their condition now is satisfactory. At first they were fed with the bottle, but now they have a wet nurse and are putting on a third of an ounce daily, their weight at present being eleven pounds. Their physical, physiological and psychic duality is beyond doubt. One laughs while the other cries; Suzanne feeds while her sister sleeps, and the will of each is independent of the other.

"Madeleine's height is 16 inches while Suzanne's is 15 1/2 inches, and the latter's chest measurement is also greater by two-thirds of an inch. Suzanne is the stronger, and the bones of her limbs are a little longer than Madeleine's. The hands and feet of Madeleine are small, her face is round, while her sister's is oval, and her heart pulsates 130 times to the minute, against 120 per minute for Suzanne. The body temperature of the twins differs slightly, and there is a difference in their cries.

"Stranger still, there is a difference in the blood of the two persons. By a microscopic examination of the blood we have counted 6,280,000 red and 6,325 white globules per cubic millimeter in the case of Madeleine, and 8,960,000 red and 7,500 white globules in Suzanne's blood."

The father of the twins is thirty-five years old and is a perfectly normal man. The mother's is forty-four. By her first marriage she had a son who is now twenty-three years old and exhibits no physical peculiarity. By her second marriage she also had a boy who died at the age of seven from scarlet fever. Doctors have been unable to trace any hereditary defects in the family.

While the doctors state that Suzanne and Madeleine are separate individuals, there must be many respects in which their sensations are confused or shared. There is no fixed line upon the band of flesh that unites them where one individual ends and the other begins. A pin prick at any spot along this uniting band causes both of the babies to cry, although a similar stimulus on the opposite side from the band would make only one baby cry. Apparently, there is a connection between the smaller nerves of the two bodies in this locality.

Taste, hunger, pain and most of the simpler sensations are experienced separately by each individual. When one baby is pleased by the taste of food in its mouth, the impression is conveyed to its brain

and causes that individual alone to coo or express pleasure. In cases, however, where an impulse is sent from one brain to the nerves of one body, the effect must be felt to some extent in the other body, on account of the connection between the two nervous systems.

Thus, a piece of ice placed on the skin would be felt by one individual alone, but the depression caused by grief, fear and other emotions, although felt by one individual first, must be imparted in some degree to the other. These psychological interactions will, it is expected, become very marked in later years if the twins are not separated.

The composition of the blood differs in one twin and the other, because each has a separate digestive system and heart. Each makes its own blood and distributes it, but the blood of one mingles with the other through the band of union. A defect originating in the blood of one must in time affect the other.

Any poison in the blood of one, such as the germs of malaria or typhoid fever, would probably pass into the circulation of the other. The union between the two abdominal cavities must also cause the twins to share many of the common ailments of mankind. They must have what is politely termed, "a stomach ache" together, because this is usually felt throughout the abdominal cavity. An attack of peritonitis must inevitably spread from one to the other.

What is the position of these unfortunate twins in the eyes of the law and the church? Have they separate personalities and separate souls, or must they be considered one, because there are so few things that one can do without the other?

It has been argued with reason by lawyers that where the connected twins have two brains they must be regarded as two personalities. Each twin, according to this theory must have the right to inherit property, to make a will, to marry and to perform all the acts lawful to a person. In pursuance of this rule it was decided in Paris that Millie and Christina—"the two-headed Nightingale"—must pay two fares on the railroads.

Millie and Christina were born in North Carolina in 1851. They were joined together by the fleshy part of the back. Millie had a fine contralto voice, and Christina an equally fine soprano voice. Hence the euphonious title of "two-headed Nightingale."

The rule that each brain shall be regarded as a separate personality appears inapplicable to those cases of two-headed twins, where many of the most important functions of life could only be performed by one body. For instance, there is a well authenticated case of two twins, named Rita and Christina, who were born in Sardinia in 1829. They had separate heads, were joined together in the upper part of the thorax, and had only one body from the waist down.

Rita and Christina had only one pair of hands between them. Could two wills, signed by the same right hand, be admitted to probate as the wills of two persons? Still more embarrassing and difficult questions might have arisen. Rita might have accepted a husband, while Christina re-



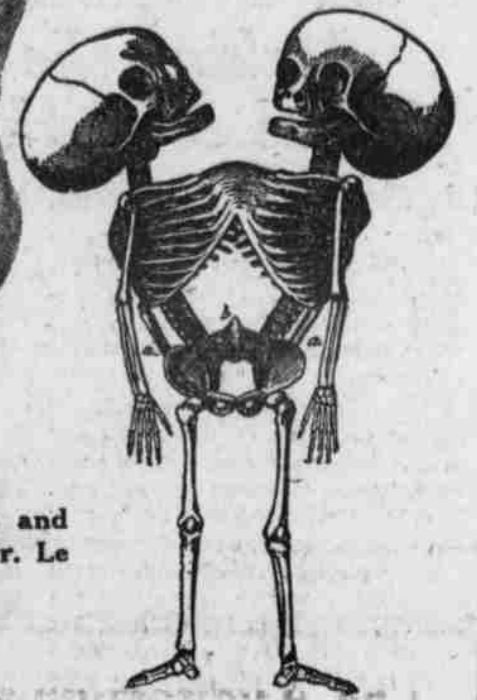
The Pretty Bohemian Twins, Rosa and Josefa, Successfully Separated by Surgery in 1902.

jected him. All the difficult problems that might have arisen in this extraordinary case of confused personality were never settled, for the twins died at the age of eight months. In recent years the most interesting case of joined twins was that of Radica and Doodica. These two little girls were Creoles, born in the French West Indies. They were brought to Paris at the age of twelve, where they excited much interest, because they were so pretty and intelligent. They



The New "Siamese Twins," Madeleine and Suzanne Durand, Photographed in Dr. Le Filliatre's Paris Hospital.

Skeleton of the Extraordinary Twins, Rita and Christina, Born in Sardinia in 1829, Who Had Two Heads but One Body from the Waist Down.



The Joined Twins, Radica and Doodica, After They Had Been Separated by Dr. Doyen in Paris in 1904.

were united by an enormous bridge of tissue extending from the lower part of the breast to the navel. The union between such twins is usually in the neighborhood of the xiphoid cartilage, at the lower end of the breast bone, and hence they are known to scientists as "xiphopagi." In the case of Radica and Doodica the connecting bond included a quantity of liver tissue, which united the livers of the little twins.

Doodica developed a rapid and hopeless case of tuberculosis, and the only hope of saving Radica was an operation to separate them. This was performed by Dr. Doyen, the daring and brilliant Paris surgeon. The connection between the two livers made the operation very difficult. The liver is very rich in blood vessels, and an operation upon it is seldom successful. In this case the difficulty was increased by the fact that one of the patients was in an

advanced state of tuberculosis, which had already done considerable injury to the other.

Dr. Doyen separated the liver by a new method of rapid crushing, and he allowed less than two teaspoonfuls of blood to flow. The operation was considered successful. Doodica died in three days from surgical shock complicated by tuberculosis, but Radica lived.

In 1900 Dr. Chapot-Prevost, of Rio de Janeiro, Brazil, performed an operation to separate the xiphopagus twins Rosalina and Maria. One of them died within a few days, but the other was living when last heard of.

The most famous, if not the most remarkable, freaks of this character were the Siamese twins named Chang and Eng, who excited great interest for many years in the United States. They were born in 1811 in Siam and acquired a fortune by showing themselves in America. Strange to say, the two inseparable brothers became great enemies and were constantly quarrelling. It was frequently necessary to stop Chang from giving Eng a beating, which would have injured one as much as the other. The two brothers married two sisters and had twenty-two children, all of whom were normal.

Chang died on January 20, 1874, and Eng died two hours later. An autopsy showed that there was a free connection between the circulation of the twins.

Embryologists state that the birth of these joined twins is very easily explained as due to the fusion of two germs more or less developed in the same ovum. It is believed that the monstrosity is not hereditary, and in proof of this it is pointed out that the Siamese twins had many normal children.

Of a character similar to xiphopagus twins are those monstrosities in which one child is born with the body of another enclosed in it. French physicians record an unquestionable case of this type. A child named Bissieu, born at Verneuil, in the Department of the Eure, developed toward the age of thirteen a very large tumor of the left side. The child died, and the tumor was found to contain the body of another child. Really a brother of Bissieu had become enclosed in his body before birth and afterward developed. Edmond About, the famous French novelist, built a romance called "The Case of M. Guerin" upon this strange occurrence, which he dedicated to the distinguished Paris surgeon, Dr. Charles Robin.

Old Pictures Prove Music Grew Out of Simply Cracking Our Fingers

YOUR bumps of "time and tune"—according to the out-of-date science of phrenology—indicated the degree of your musical capacity. Everybody knows that the two fundamental elements of music are rhythm and a melodic succession of pleasant sounds varying in pitch. The initiated will inform you that the harmonious blending of sounds of different pitches—high, low and medium, constituting harmony, and the elaborate systems of polyphony developed with the perfecting of the modern orchestra round out the science and art of music as now practised.

But "time and tune" continue to be the most important elements in music, and of these it has long been known that "time," or rhythm, was the original progenitor of the whole system. Long before people sang or played upon musical instruments they danced in time with rhythmical sounds which were musical only by accident.

Interesting proof of this exists in relics of the ancient civilization of Egypt and Chaldea—carvings, instruments and wall sketches, drawings of some of which are reproduced here. Excavations at Thebes discovered has reliefs of figures dancing to the rhythm of snapping human fingers. Several other



Wall Painting on One of the Earliest Egyptian Tombs Showing a Dance to the First Form of Music—Snapping Fingers.



Assyrian Wall Sketch Showing the First Flute, Centuries Later Than the Finger Music.

figures are clapping the hands together. Not even instruments of percussion, like the "bones" used by negro minstrels are missing. It is significant, however, that most of these ancient instruments—always in pairs—were carved in imitation of human hands and arms, thus showing their derivation from the acts of hand-clapping and finger-snapping, showing that those methods of producing rhythmical sounds marked the beginning of the art which has produced the music of today.

These instruments of percussion are called "crotales." Even bits of wood and metal clacked together produce different pitches. So one is not surprised to find the Syrians and Chaldeaans substituting discs of metal, from which the "tinkling cymbals" evidently were derived. In the same countries the act of blowing into the end of a hollow reed evidently marked the origin of the flute.

There is an ancient Chaldean wall sketch showing a dog charmed by the sweet sounds made by an ancient flute-player.

There is similar evidence that pleasant tone qualities of tight-stretched strings were discovered at about this time—for there are bas reliefs of primitive forms of harps. The periods represented by these relics prove, however, that rhythmical finger-snapping and hand-clappings were the actual beginning of some of the most inspired music of today.



Wooden Clappers Supplant Fingers in Music's Next Step. (Egyptian Tomb Relief)