

self. Winthrop found a camp chair, and placed it near her as she slowly swayed in her hanging seat to and fro. De Torrez remained standing—according to his method. He stood with folded arms in the shadow, close to the side of the house, but without touching it. He stood there one hour. It is possible that he found the occupation somewhat tedious, unless, indeed, the picture of Garda in the moonlight was sufficient for his entertainment. Certainly there was very little else to entertain him. Garda and Winthrop talked English during the entire hour.

"Ernesto," said Manuel, on their way home, giving a rapier-like thrust in the air with his cane, "that Northerner, Winthrop, is simply unendurable."

"He is a matter of indifference to me," replied De Torrez.

"What, when he keeps you out there on the piazza for two hours in perfect silence? I listened, and you never spoke one word. He talked to Garda himself all the time."

"*That*—I suffered," said De Torrez, with dignity.

"Suffered? I should think you did! Are you going to 'suffer' him to buy East Angels too?"

"He may buy what he pleases. He cannot make himself a Spaniard."

"The mother, you remember, is a Northerner," said Manuel; "that makes a great difference."

"I remember perfectly," replied the Cuban. "The señorita will always do—"

"What her mother wishes?"

"What she pleases," answered De Torrez, serenely.

SEVEN GOLD REEDS.

SEVEN gold reeds grew tall and slim,
Close by the river's beaded brim.

Syrinx, the naiad, flitted past;
Pan, the goat-hoofed, followed fast.

Oh, such a race was joy to see,
Swift as the flight of bird or bee.

As lightly beat the girl's white feet
They made strange music low and sweet;

So heavily trod the lusty Pan
His hoofs clashed loudly as he ran.

He spread his arms to clasp her there
(Just as she vanished into air),

And to his bosom, warm and rough,
Drew the gold reeds close enough.

Then the wind's low voice began
To hum in the furry ears of Pan.

Out of green bark he made a tether,
And bound seven joints of the reeds together,

And blew a tune so sweet and clear
That all the wild things came to hear.

* * * * *

So, to this day, the poet's fire
Springs out of his unslaked desire,

When Love on wingèd feet has fled,
And seven gold reeds are clasped instead!

THE BRAIN OF MAN, ITS ARCHITECTURE AND REQUIREMENTS.

SOME thirty-six years ago, by a premature explosion of gunpowder, an iron bar three and a half feet long, one and a quarter inches in diameter, and weighing thirteen and a quarter pounds, was shot completely through a man's head and perforated his brain. This man walked up a flight of stairs after the accident, and gave his account of how it happened. Although his life was despaired of for some time, he developed no paralysis, nor did marked impairment of his intellectual faculties follow convalescence. Eventually he recovered his health. Twelve years elapsed before his death, during which time he worked as a laborer on a farm.

The "American crowbar case" at once became famous. It startled the minds of the reading public, and confounded the medical fraternity. No satisfactory explanation of the remarkable features of the case could be given. Some prominent medical men pronounced it "an American invention," and laughed at the possibility of such an occurrence. The skull was exhumed, however, after death, and is to-day in the medical museum of Harvard University.

This case may be said to have been the starting-point of a new epoch in medical science. It rendered untenable all previous hypotheses that had been advanced regarding the organ of the mind. It proved conclusively that little, if anything, was known at that time respecting the architecture of the brain of man, and the functions of its component parts.

Since then a large number of observers have published the results of various forms of experiments upon animals, made with a view of determining the physiology of the brain; but for some years the conclusions drawn from such investigations were contradictory, and nothing was definitely established. We now are aware that serious defects existed in the early methods of research. By great ingenuity these have been gradually eliminated. We owe, however, to the discoveries of Türck, Fritsch and Hitsig, Waller, Flechsig, and Gudden most of our knowledge of new methods of research which have simplified the study of the nervous system during life and after death. These have settled many points in dispute. They have also made our knowledge more accurate, and in accord with clinical observations.

The last decade has enabled us to bring most of the results obtained by vivisection into perfect harmony with pathological data. Those who have claimed that conclusions drawn from experiments upon animals are not applicable to man are to-day confronted with unanswerable facts to the contrary. Nature, through the agency of disease processes, is constantly performing experiments upon human brains, and the symptoms so produced may be recorded during life, and compared with the changes found in the brain after death. Physiology and pathology have thus added much to our knowledge in this field.

To-day the "crowbar case" is no longer a mystery to specialists in neurology. Bullets have been shot through the brain since then without loss of motion, sensation, or intellect; and in some cases they have been known to remain buried in the brain substance for months without apparent ill effects. Three years ago a breech-pin of a gun, four and three-quarter inches long, was forced into the brain of a boy nineteen years old, through the orbit, and its presence was not suspected for some five months. It was discovered during a surgical attempt to repair the facial deformity that resulted from the accident. Death followed the removal of the foreign body from the brain, in consequence of inflammation, created apparently by its extraction. This case is quite as remarkable as the crowbar case, but it excited less interest in neurological circles because we are in possession of new facts.

We know to-day that if even a needle be thrust into one region of the brain (the medulla oblongata, Fig. 1), immediate death may follow, while a crowbar may traverse another portion of the organ and recovery be possible. The effects of injury to the brain depend rather upon its situation than its severity.

In the light of our present knowledge the brain must be regarded as a composite organ, whose parts have each some special function, and are to a certain extent independent of each other. One limited part is essential to vital processes; hence its destruction causes death. Another part presides over the various movements of the body; hence paralysis of motion is the result of destruction of any portion of this area. A third part enables us to appreciate touch, temperature, and pain;