

gines heavy, and hence the ship cannot be given such a large coal-carrying capacity.

"Another difficulty under which our navy is laboring is the lack of good sailors to man the vessels and operate the complicated machinery and apparatus. A few of our American sailors, it is true, are highly efficient, but we have not enough men capable of properly handling a modern ship. This, however, is a question of administration, and the defect will, without doubt, soon be remedied.

"The proposition to keep the engines in good condition and up to their maximum efficiency by employing the vessels in carrying the mails, or in some similar work, is highly impracticable. In the first place, a cruiser is made to cruise, not to carry freight or passengers other than the crew, but to act in the event of war as a commerce destroyer, combining the quality of speed and a gun-carrying capacity. Now, to employ a cruiser for any such purpose as the one mentioned would be entirely subversive of the very end in view. It would result, not in the improvement of men or machinery, but in great detriment to the engines and apparatus. The simile comparing the proposed plan with putting a race horse through his paces is a faulty one. There can be no comparison between a living being and a machine. The former has the power of recuperation. It repairs itself automatically. The engine has not this power, and for every pound of work performed it is less efficient than before. So the cases are essentially different. With one the product is exercise, with the other it is wear and tear.

"In all the discussion concerning naval matters in general, and armed cruisers in particular, there is, I think, too much importance given to high speed as a factor. Now, if we bear in mind what I have said, that a war vessel is a bundle of compromises, and also the fact that the commerce of the world is carried in slow-going ships, it will be seen that continuous high speed is not the all-important factor in the construction of commerce destroyers."

POSITION OF THE PLANETS IN FEBRUARY.

JUPITER

is evening star until the 13th, and then becomes morning star. He comes to the front on the February annals, for an important epoch in his course takes place. This is his conjunction with the sun, on the 13th, at 10 h. 5 m. A. M. He is then in line with the sun and earth, the sun being in the middle, is at his greatest distance from the earth, and, passing beyond the sun, appears on the sun's western side, to commence his role of morning star. The giant planet is conspicuous by his absence from the sky during the month, for he is so near the sun as to be hidden in his light.

The new moon, when only three hours old, is in conjunction with Jupiter on the 9th, at 0 h. 32 m. A. M., being 4° 12' south.

The right ascension of Jupiter on the 1st is 21 h. 38 m., his declination is 14° 59' south, his diameter is 31".4, and he is in the constellation Capricornus.

Jupiter sets on the 1st at 5 h. 54 m. P. M. On the 28th he rises at 6 h. 10 m. A. M.

VENUS

is morning star. She reaches her greatest western elongation on the 13th, at 3 h. 40 m. P. M., and is 46° 51' west of the sun. She then takes on a beautiful form, that of the moon in quadrature. Before western elongation her form is that of a crescent, after western elongation she becomes gibbous. Her decreasing size and brilliancy and her approach to the sun after elongation are worthy of note for observers who are up betimes to behold this peerless star, a glorious object in the morning sky during the month. The western elongation of Venus occurs about five hours after the conjunction of Jupiter with the sun, and as soon as Jupiter is far enough from the sun to be visible there will be two bright morning stars approaching each other.

The waning moon, about three days before her change, is in conjunction with Venus on the 5th, at 0 h. 34 m. P. M., being 5° 27' south.

The right ascension of Venus on the 1st is 17 h. 48 m., her declination is 19° 19' south, her diameter is 28".8, and she is in the constellation Sagittarius.

Venus rises on the 1st at 4 h. 4 m. A. M. On the 28th she rises at 4 h. 13 m. A. M.

SATURN

is morning star. His role in this character is nearly completed, for when the month closes he rises only a few minutes after sunset. He is, however, on the western side of the sun, and, according to astronomical classification, is ranked as morning star. He shines in the eastern sky, early in the evening, as a conspicuous star, southeast of Regulus, his close companion during the last year, but now far removed.

The moon, the day after the full, is in conjunction with Saturn, on the 24th, at 7 h. A. M., being 3° 4' north.

The right ascension of Saturn on the 1st is 11 h. 12 m., his declination is 7° 27' north, his diameter is 18".4, and he is in the constellation Leo.

Saturn rises on the 1st at 7 h. 54 m. P. M. On the 28th he rises at 5 h. 58 m. P. M.

MARS

is evening star. There is nothing new or interesting in his course as he makes his way toward the sun, and increases his distance from the earth, but, indifferent to terrestrial observation, he plods on in his appointed course, and little heeds the sensation he may create when he returns to our nearest neighborhood in 1892.

The moon is in conjunction with Mars on the 12th, at 5 h. 46 m. A. M., being 4° 38' south.

The right ascension of Mars on the 1st is 0 h. 17 m., his declination is 1° 34' north, his diameter is 5".6, and he is in the constellation Pisces.

Mars sets on the 1st at 9 h. 33 m. P. M. On the 28th he sets at 9 h. 28 m. P. M.

MERCURY

is morning star. He reaches his greatest western elongation on the 6th, at 4 h. 48 m. A. M., and is 25° 40' west of the sun. He is then, and for a few days before and after, visible to the naked eye, but is not in favorable condition for observation on account of his southern declination.

The right ascension of Mercury on the 1st is 19 h. 18 m., his declination is 20° 55' south, his diameter is 7".2, and he is in the constellation Sagittarius.

Mercury rises on the 1st at 5 h. 42 m. A. M. On the 28th he rises at 6 h. 1 m. A. M.

NEPTUNE

is evening star. He is in quadrature with the sun on the 22d at 5 h. P. M., is then 90° east of the sun, and is on the meridian at sunset.

The right ascension of Neptune on the 1st is 4 h. 9 m., his declination is 19° 22' north, his diameter is 2".6, and he is in the constellation Taurus.

Neptune sets on the 1st at 2 h. 28 m. A. M. On the 28th he sets at 0 h. 42 m. A. M.

URANUS

is morning star. His right ascension on the 1st is 13 h. 58 m., his declination is 11° 27' south, his diameter is 3".6, and he is in the constellation Virgo.

Uranus rises on the 1st at 11 h. 45 m. P. M. On the 28th he rises at 9 h. 58 m. P. M.

Mercury, Jupiter, Venus, Uranus, and Saturn are morning stars at the close of the month. Mars and Uranus are evening stars.

Tricks of the Imagination.

BY H. C. HOVEY.

The delusions and hallucinations of insanity have been remarked upon by all writers on mental derangement. But my intention now is to give a few authentic cases where the excited imagination of people with seemingly sound brains has played them singular tricks.

A report has gone the rounds to the effect that a certain lady residing in Bridgeport, Conn., called her physician in mortal agony because she had, as she supposed, swallowed her false teeth. She could feel them far down in her throat and was actually choking to death. Eminent doctors consulted and agreed to resort to tracheotomy, to which they were about to proceed when one of them happened to step on some object under the edge of the bed, which on examination proved to be the missing molars. As soon as they were exhibited to the patient her convulsions ceased, and she recovered her normal condition. Sifting the facts from the sensational accompaniments, there remains the delusion as to the teeth, the calling for medical aid, and the finding of the teeth before the doctor arrived on the scene. But even thus modified the case was quite remarkable. It suggests instances of somewhat the same nature.

During the war an officer had to send a messenger across an opening where the bullets were flying dangerously. He selected a very brave man and cautioned him as to his peril, telling him to ride for his life on reaching the open field. The officer watched him through his field glass, saw him fling himself behind the flank of his horse for safety, and finally saw him drop from the steed as if mortally wounded. A second man was sent safely on the same errand, while the wounded soldier was cared for. He had merely fainted. On coming to he found the surgeon at work over him, and anxiously inquired as to the precise nature of the wound. He was told by the surgeon that he had been squarely hit, and that the injured part could never be made whole again. "But rest easy," said the doctor, "for the shot only took effect—in the canteen!" The man had not been injured in the least, but had been deceived by the flowing of the contents of his cherished canteen, which under the circumstances he naturally mistook for his heart's blood. The soldier is living yet to laugh over his ludicrous mishap.

As names are not mentioned, I may be pardoned for narrating an incident in the experience of an evangelist of renown, and as remarkable for his common sense as for his piety. He came to a sudden pause in an impassioned discourse to fully 5,000 people. As I happened to be near him, he beckoned to me to accompany him to a private room, while the choir should entertain

the astonished audience during the interim. My clerical friend solemnly assured me that he was about to die, and that sensations of mingled pain and rapture had seized him such as he had never felt before, and that convinced him that his time had come to depart. With some difficulty he was led to submit to an examination, when it appeared that a vial of aconite which, for some reason, he carried in an inner pocket, had been broken by one of his more vigorous gestures, and the pungent contents flowing over his chest had caused the peculiar burning sensations described. After a process of sponging the saint decided to tarry among sinners for a while longer, and resumed without special explanation his interrupted sermon.

A gentleman who is now the admired editor of a popular scientific magazine was some years ago made the victim of a practical joke that narrowly escaped a serious termination. He entered a room where some of his jovial friends were having good cheer. Being himself, at that period of his life, of a convivial turn, he readily joined his comrades in cracking a fresh bottle. Presently one of them anxiously looked at the label, that had been modified for the occasion, and exclaimed that they had been drinking poison. The visitor grew alarmed, manifested dangerous symptoms, took to his bed, and his comrades themselves becoming frightened, sent in haste for a physician, whom it took a long while to satisfy his imaginative patient that he was not perishing from a deadly potion.

An eminent New York physician, who was fond of experimenting, told a friend that he had compounded some wonderful pills, a single one of which would cause certain described symptoms. His friend volunteered to take one. The symptoms followed exactly as foretold; but the pill was afterward noticed in the tangles of a very full beard, not having been swallowed at all. The doctor's faith in the potency of his pills was such as to make him think that their mere proximity to the mouth might prove to be efficacious. But we bystanders attributed the unquestioned symptoms to the influence of an excited imagination over the physical condition.

To the foregoing authentic instances now first published might be added a long list of recorded cases with every variety of delusional fancies, the victims being of sound mind and in ordinary health. These phenomena cannot be classed as morbid, nor can they readily be explained by hypnotism. But they certainly have a value in the delicate task of determining the significance of bodily symptoms. They teach that acute pain, great discomfort, deadly wounds, and also the beneficent effects of curative medicines may be simulated by experiences that in reality are purely mental. To make light of such ills would be cruel. To treat them physically would seem to be absurd. Their remedy, like their cause, must be mental. Herein is the secret of the "bread pill" system. A sidelight is also thrown upon the marvels of faith cures, mesmeric healing, mind cure, and, if we may say so, of so-called Christian Science itself. And spurning quackery and imposture, there certainly is room, in a wise and sensible system of healing, for an agency known to have such amazing power as the imagination.

A caution is also in order of an educational sort. Constant appeals are being made to the imaginations of children, some of which may be temporarily beneficial, but most of which are harmful first or last. The bold climber is warned that he will fall; and giddiness follows, provoking the very evil shunned. Shout to the careless swimmer that he is beyond his depth and cannot possibly reach the shore, and he may fancy that his case is really desperate and be drowned, when considerate encouragement would have strengthened him to gain the strand. Cram a young mind with a horror of mad dogs, and in later years nervous symptoms may follow the bite of a non-rabid animal almost as serious as hydrophobia itself. The physical effects of pernicious literature are deplorable, as well as the deprecation of morals. In short, the imagination is not to be trifled with. Its wonderful power should be used only for good. Thus used, it is the handmaid of science and of virtue, the helpful servant of the healing art, and the fountain of happiness. A clean, sound, wholesome imagination, as contrasted in its effects with one that is foul, depraved, and disordered, is probably what the wise man had in mind in saying, ages ago, "Keep thine heart with all diligence, for out of it are the issues of life."

Agricultural Electricity.

M. Comille Gonzy, the proprietor of numerous small farms in the commune of Millas (Western Pyrenees), having an area altogether of nearly 1,500 acres, has, for some time past, been utilizing a neighboring stream for electric lighting purposes. He has now applied electric power to the working of a wine-crushing plant. Besides providing the power for lifting and driving purposes, electricity is made to work the pumps for irrigating the vines. The 180 16-candle power lamps employed are distributed over all the farms, and the area which they cover may be judged from the fact that the length of telephone wire connecting the buildings is 62 miles.