

BICYCLE EXERCISES AT LEIPZIG.

“Professional Riding for the Championship of Europe for 1894.” Under this title two of the most celebrated artistic riders competed in Albert Hall of the Crystal Palace at Leipzig on January 25 last. They were the American, N. C. Kaufmann, and the Frenchman, August Gouget. Kaufmann had often been in competition with Gouget, and has now won the championship. The competition was so arranged that the champion was to perform feats which were to be performed afterward by his adversary, and *vice versa*. There were two referees, who were to select a third. These three judges chose a jury consisting of five men, who were to fix the number of points to be given, the highest number of points to be given for one exercise being five. The two competitors put up a stake of 1,000 marks (\$238), and besides this the victor received a gold medal worth 300 marks (\$71). The contest lasted four hours, and was watched with the greatest interest by an audience of thousands. Each rider performed feats in his own way on cycles of all kinds. While the Frenchman excelled more in gymnastics and acrobatic feats than in balancing, Kaufmann surprised the audience by a number of tricks such as had never been seen before, which he performed with wonderful skill, surety and elegance. Kaufmann won by 284 4-5 points against 228 2-5 points.

In the accompanying engraving we show a number of the exercises which were performed by the two men, Figs. 1 to 6 being feats performed by Kaufmann, some of which were well copied by Gouget, and others not as well; while Figs. 7 to 10 illustrate exercises in which Gouget far surpassed his opponent. The remarkable exercises on the steps and ladder were not attempted by Kaufmann. Gouget was not to be scorned as an opponent.—*Illustrirte Zeitung.*

Woman's Suffrage and Woman's Brain.

The present very active and enlightening agitation over the question of woman's suffrage calls up again the many now established facts about the physiological differences in the nervous system of the sexes. Not very long ago, Sir James Crichton Brown delivered a series of lectures in which he aimed to show, from actual data, that the brains of women were not only relatively smaller, but essentially different in structural arrangement and functional characteristics from those of men. He in particular showed that the vertebral arteries in women are larger in proportion to the carotids than they are in men, and that the cerebellum and posterior parts of the brain were therefore more nourished proportionately. The brain of woman is four per cent smaller than that of man after deducting the factors of height and weight (Debierre), and woman's brain, as soon as it reaches its apogee, immediately begins to decline in weight, so that senile atrophy is manifested sooner than in man.

There is no doubt, we believe, in the minds of physiologists that the mental characteristics of women have a structural basis in the conformation and amount of her nervous tissues, and that no amount of training will make the male and female brain alike.

Of course, all this does not in the least prove that woman's mind is not adapted to the demands of suffrage, or of political, jury, and militia duty. It only shows that the result of conferring suffrage cannot be positively predicted either one way or the other, since it would be injecting into our political system an entirely new factor.

We admire the eloquence and are affected by the enthusiasm of the agitators for and against suffrage. But we have little faith in those who assure us that it would surely be a blessing—or a curse—if women went to the

polls and sat in the jury box. It is an experiment which may or may not turn out wisely.—*Med. Record.*

The Fall River Liner Priscilla.

The trial trip of the Priscilla, the new steel passenger steamer of the Fall River line, the largest side-wheel steamer afloat, took place May 9. Her speed is 20 knots an hour. The hull of the Priscilla, built by the John B. Roach Company, of Chester, Pa., is 423½ feet long on the water line, 52 feet on the beam, and 20½ feet in depth, divided into 61 water-tight compartments. The main engine has 8,500 horse power, and drives a pair of feathering paddle wheels, 35 feet in diameter. The engines and boilers are similar to those in the other Fall River boats, except that the motive power is greatly increased. The boilers—ten in number—are of the single-ended Scotch type, max-

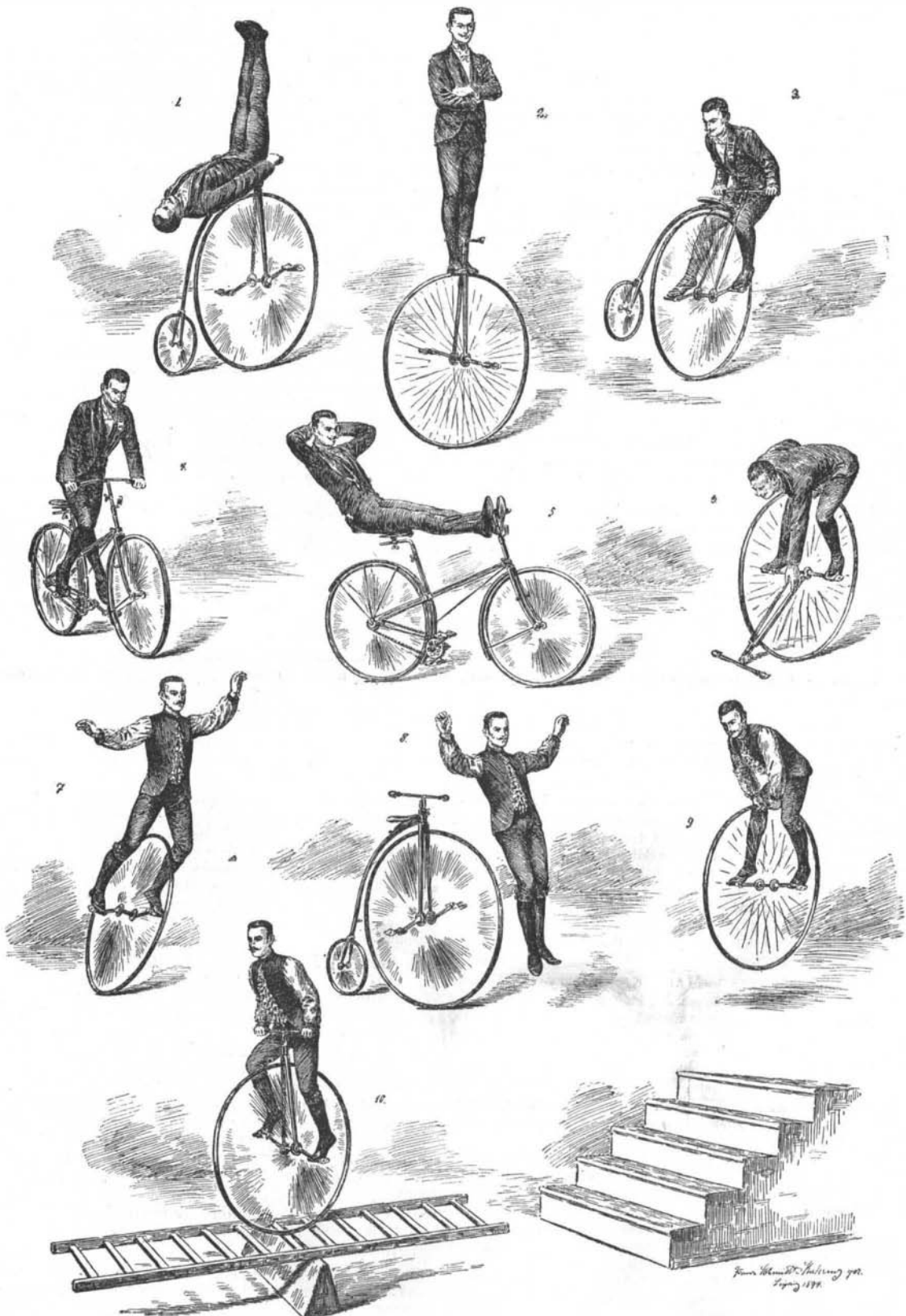
The Army as a High School.

We gave prominence to Captain Burns' proposed system of army education in accordance with our general policy of encouraging discussion on subjects relating to the interest of the services. There is another side to the question, and this is presented in a communication we have just received. Our correspondent asks a question that is being asked by many other officers of the army, and that why the district school should be brought into the army; why in time of peace men who are not even possessed of a common school education should be enlisted for the army. The country has a school system, a good one, free to all who choose to avail themselves of it. A young man whose early youth has been so misspent that he is an ignoramus at the age of twenty-one should not, our correspondent thinks, be allowed to encumber the service. It is nothing to the purpose to say that his want of the knowledge that every American boy of fourteen ought to possess is his misfortune, not his fault; that the necessity of working for a living has kept him away from school. The same plea may be advanced, relatively, by the youth with a spinal curvature, that he is not to blame for the disqualification. There is no lack of young men who are fit, mentally as well as physically, for the ranks. The recruit is to be a soldier, and if, after he has enlisted, he is to pass a portion of his time in learning what every young American is supposed to know, so much time is taken from that which might be spent in teaching him how to become a soldier. When the recruit goes to the post school, he does so by order; he is thus made to feel his ignorance, and that he is in this respect apart from and beneath his fellows, and he does not like it. That is to say, the American youth does not. The foreigner who enlists for food, shelter, pay, and clothing, cares very little about anything else, for he has always been under somebody in the Fatherland.

Many of the enlisted men who make up the vast European armies are necessarily recruited from the peasantry who are dull naturally, and ignorant from force of circumstances. Such men offer a fine field to the schoolmaster. But with an army of only 25,000 men we can afford to be more circumspect and to reject applicants who have not already received the elementary instruction that Europeans find necessary to administer to their untaught masses. The American youth is usually in advance of it; and if the recruiting officers will exert themselves the new men who come into the service need not be a stupid lot. Let there be a system of instruction at all posts, but let it be military in its trend, our correspondent argues, and serve for those who show aptitude for the position of non-commissioned officer and for

those who desire to go up for examination for commissions. Let the instruction be of such a nature as to create in the mind of the soldier the conviction that he is bound to make fair return to his country for its fostering care of him and of his home.—*Army and Navy Journal.*

FROM many observations and experiments M. Ph. Lenard finds that drops of water falling upon water or wet bodies generate electricity, the water becoming electrified positively, and the air escaping negatively electrified from the foot of the fall, and light impurities in the water diminish the effect considerably. The essential conditions of electrification are the concussions among the drops themselves and against the wet rock, no effect being due to the water's fall through the air and its dispersion by it. A jet of water falling from an insulated tank to an insulated pail electrified the latter positively, while the negative electrification of the surrounding air grew to several hundred volts.



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imum pressure 150 pounds. The boilers have a mean diameter of 14 feet and are 14½ feet long. The steamer is provided with two large fire and wrecking pumps on the main deck. The engines and boilers were made at the works of W. & A. Fletcher, Hoboken, N. J.

The Priscilla is decorated in the style of the Italian Renaissance. The great staircase, which from time immemorable has been a distinctive feature of the American side-wheeler, is of solid mahogany. The quarter-deck is laid in marble mosaic. The dining room is finished in mahogany. Five decks permit of large rooms for the use of the passengers, the saloon being particularly fine. There are 361 staterooms, and in the cabins are 219 berths. The steamer is lighted by 1,900 incandescent lamps, and there is also a cold storage plant. The Priscilla will carry, in addition to her cabin passengers, 89 second-class passengers. The total cost of this magnificent vessel, when complete, will be \$1,500,000.