

Sports and Pastimes.

SCOTLAND'S CHAMPION ROWERS.—A FAMOUS IRISH COMBINATION.

ROWING on the Clyde, once a highly popular pastime, showed decided signs of revival, and it is gratifying to know that amongst the most popular crews at present practising on the river, few are held in greater esteem than the "Unity," a crew composed of young Irishmen and trained by an Irishman. Previous to 1896 the crew had been well-known on the river as individual oarsmen. Two seasons ago, by the efforts of Mr. John Crossan, they were brought together and formed a crew under the name of the Unity. Their names are: Bow, F. Kane, 18 years of age; mid stroke, D. McCormick, 24 years of age; third stroke, G. Banks, 19 years of age; and fourth stroke, R. D. Brady, 19 years of age. It is interesting to note that Banks and McCormick are the champion pair of Scotland an honour not lightly won, nor easily kept, while Brady and Kane won the pair championship in the Clyde "Youths" regatta lately. Mr. Crossan is also trainer to the Clydesdale Amateur Rowing Club, which with characteristic generosity not only gave him permission to train the "Unity," but also gave the crew the use of their handsome clubhouse. These privileges have been duly appreciated by the "Unity" lads, who have before now proved they are made of the proper stuff, and that they are by no means unworthy of the privilege granted them. The crowning effort of the "Unity's" short but brilliant career took place on the first Saturday of August when they beat the famous Dumbarton crew for the championship of Scotland. The race took place over the two miles and a quarter course on Loch Lomond, and after a terrific contest the "Unity" won by about six boat lengths. This was the first defeat of the Dumbarton crew, who held the championship of Scotland for seven years. The success of the crew is in great part due to the system of training carried out by Mr. Crossan, who is ceaseless in his efforts to make his crew pass the winning post first. Mr. Crossan is, needless to say, exceedingly popular with his boys, while he is also held in the highest esteem by the members of the Amateur Rowing Club. The "Unity" crew has also received great assistance from Mr. George Geddes, but they could do with a little more support from their own people. The Celtic Football Club might do worse than extend their patronage to the crew, while the members of the Hibernian Swimming Club might with advantage do the same. As will be seen, the crew are only lads, and have a great future before them. So far they have conquered all comers, and we sincerely trust that in their case at least history will repeat itself in the future.—*Edinburgh Herald*.

TIPS FOR CYCLISTS.

An eminent surgeon gives the following excellent rules for bicycle riding:

1. Never ride within half an hour of a meal, which means either before or after.
2. Wheel the machine up any hill the mounting of which causes any effort.
3. See that the clothing around the neck and chest is loose.
4. Have the handle-bar sufficiently raised to prevent stooping.
5. Be as sparing as possible of taking fluids during a long ride. Rinsing the mouth thoroughly with cold water will quench the thirst as well as, if not better than, taking fluids into the stomach in large quantities.
6. Unless the winds and roads are favourable, never ride more than ten miles an hour, except for very short distances.
7. Never smoke while riding.

Attention to these points will tend to relieve the pressure on the right side of the heart, breathlessness will largely be prevented, and even persons with certain forms of heart disease may ride with safety.

Science Notes.

JUMPING BEANS.

AMONG the exhibits now on view at Earl's Court is a tray of "jumping beans," the explanation of whose enigmatic movements leaves much that is still inexplicable. The *carpocapsa saltitans*, to give it its scientific name, is the fruit of a tree recently found growing in a small patch of mcrass near Alamos in Mexico. It is a three-lobed berry, not unlike a small nutmeg, which splits on falling to the ground. Two of the segments contain a round black seed, while the third encloses the jumper, a thirteen-foot worm, eleven millimetres in length by three in breadth. This h'mrit, animated by an irresistible desire for foreign travel, immediately seeks, by the jerky movement it has the power of imparting to its shell, to get to the greatest possible distance from its native place, an instinct explained as due to the sense that it will be safer elsewhere. The bean ripens in July or August, and its movements continue until the following April or May. As there is no aperture perforation by which the inmate could have penetrated the shell, it is conjectured that the egg is laid in the flower before the fruit is formed, and that the visit of the insect is necessary for its fructification, which would account for the strange fact that each entire fruit lodges one of these parasites. During its imprisonment it is believed to eat nothing, and if a hole be pierced in its dwelling, it will repair it by weaving a web across it. Of course its life-history cannot end in this living tomb, since it must escape and develop into some sort of fly in order to lay its eggs and complete the cycle of change. Its movements are as varied as they are mysterious, for it performs them without any sort of external fulcrum or leverage, sometimes turning somersaults, sometimes progressing straight ahead in a series of jerks, sometimes even jumping clear off the ground, in defiance of all known laws of mechanics.

HARDER THAN A DIAMOND.

Within a few days (says the Boston *Pilot*) the Patent Office will grant title in a discovery which may fairly be considered as being the most remarkable since the X-Ray. It is for a substance that is harder than the diamond, and the inventor is Moissain, the French *savant*, whose experiments in the line of diamond making by artifice have obtained such wide publicity. The utmost secrecy has been maintained in regard to the matter, but investigation reveals the fact that the substance in question is a carbide of titanium—that is to say, a compound of carbon with the metal titanium. There can be no doubt that its production in quantities will revolutionise many industries where abrasives are employed, and it may even be used for the cutting of diamonds.

Titanium is one of the most interesting of the rare metals. It is about half as heavy as iron, and, like the latter, it is white when perfectly pure. Chemically it resembles tin, while in its physical properties it is like iron. The familiar mineral "rutile" is an oxide of titanium, and is used to give the proper colour to artificial teeth. A small quantity of the mineral put into the mixture for tooth enamel produces the peculiar yellowish tint that counterfeits nature so admirably.

Titanium has no other commercial use than this. There is none of it on the market in the metallic state, and probably not an ounce could be obtained at any price by advertising for it. Dealers in rare metals will quote you gallium at 3,000dols. an ounce, germanium at 1,125dols. an ounce, rholium at 112dols. an ounce, ruthenium at 90dols. an ounce, iridium at 37dols. an ounce, osmium at 26dols. an ounce, and palladium at 24dols. an ounce; but they have no titanium to sell, because there is no demand for it, and also for the reason that it is extremely difficult to separate from the substances with which it is combined in nature. At the same time there is no doubt that plenty of it could be produced at a very moderate cost if a large demand should spring up. Though classed as a rare metal, it is not really such, inasmuch as it is a common impurity in iron ores.

THE SCOURGE OF THE YUKON.

According to *Science* *Siftings* the cold and other privations which have to be endured by those who seek their fortune in far away golden Klondike are supplemented by yet another—the mosquito pest, the scourge of Yukon Valley. It is of greater size and deadlier industry than others of its kind. It is only the female bites, and her biting apparatus is of a formidable character. In the little tube, no thicker than a hair, projecting from the mosquito's head, are no less than six piercing instruments, and when the obnoxious insect settles down to its business all these are pressed to the skin to the discomfort and pain of the person upon whom the pest has fixed for her meal.

Grave and Gay.

MR. BEERBOHM TREE IN DUBLIN.

THERE are two or three good stories, in an interview with Mr. Tree, which appeared in the *Freeman's Journal*. For instance, Mr. Tree said: "To tell you the truth I am against reading—on principle. It spoils all originality. It fills a man with second-hand thoughts that were made by other people. I once delivered a lecture against the pernicious habit of reading to a very learned body. I will send you a copy. There was a deep pained silence amongst the audience when they began to understand what I was at. But it came all right; I had one true and earnest sympathiser, anyhow. He came to me after the piece was over, sprinkling his 'hatches' all over the place. 'Shake hands, Mr. Tree,' he said, 'you're sentiments is mine. I have never read anything during my whole blooming life, and I don't mean to.' Again: 'But it wasn't altogether of the theatre I was thinking when I said I liked Dublin. There is always something curious and a nusing happening to you here that could not happen anywhere else. Here's a small example of what I mean. I sent a man the other day in a hurry to post some letters in the General Post Office. He came back breathless. 'Were you in time?' I asked. 'Barely, your honour,' he answered. 'They were out of stamps and I had to get them at a public house.' " "I have had quite a number of delightful experiences with the Irish jarvey. I must honestly confess they always had the best of me. On one occasion I was talking of an eminent statesman. 'I believe you are going to set up a statue to him in Dublin?' I said. "Can you tell me where it is going to be erected?" "At the bottom of the Liffey," he answered promptly. "Come, my man, don't give way to levity," I replied. "I am credibly informed that the statesman in question is now the most respected and popular man in Dublin." He looked at me with a conical expression of appeal in his face. "Well, sir," he said, "if you are going to creep up my back, don't do it with hob-nailed boots." Another jarvey was less complimentary. We got a great reception in Dublin on one occasion, I think it was the time I crossed straight over after playing before her Majesty. I suppose I was a little elated. 'This company at the Gaiety is creating a great sensation in Dublin,' I ventured to say to the jarvey. 'Not half as much as the small-pox,' was the unexpected reply."

MEETING BOTH ENDS.

Smith walked up Market street the other evening with a box of candy under one arm and a big package of meat under the other.

"Hello, Smith," said Brown. "gone to house-keeping? I didn't know you were married."

"I'm not yet."

"Where are you going with that candy and meat, then?"

"Going to see my girl."

"Do you have to furnish the family with meat already?"

"Oh, no; the candy is for the girl and the meat is for the dog, I have to square myself with both."—*San Francisco Argus*.