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SCIENTIFIC AMERICAN SUPPLEMENT

No. 651.

For the Week Ending June 23, 1888.

Price 10 cents. For sale by all newsdealers.

THE EMPEROR OF GERMANY.

On June 15, the Emperor of Germany, Frederick III., passed away. On March 9, three months and six days before his own death, his father, William I., died, leaving his son and heir-apparent suffering with cancer, an incurable disease that threatened his death at any moment. He was born October 3, 1831, in the palace at Potsdam, a castle which was built by his ancestor, Frederick the Great. He was an only son of the Emperor William. His mother, the Empress Augusta, had been Princess of Saxe-Weimar. He visited England when but seven years old, and there made the acquaintance of Victoria and her family, among whom he met his future wife. In 1855 he was betrothed to the Princess Victoria, and three years later he married her. His return to the Continent with his bride was made the occasion of great rejoicings and ovations.

He served in the army with much distinction through the campaigns of 1866 and 1870–71. Though apparently a born soldier, and acting no perfunctory part when in the field, he is said to have been greatly opposed to war, not recognizing in it a path to glory, but a painful necessity.

He had been troubled for some years with his throat, when, in 1887, the cancerous symptoms developed that have been the premonitors of his death. Attended by the best physicians, he was an invalid at San Remo when the news of his father's death reached him. He at once returned to Berlin and was crowned Emperor. Thus he secured the imperial status for life of his wife, which, had he never been Emperor, might have been endangered. His proclamations and all that he has done in the few months of his tenure indicate a man of the best motives, and make it probable that Germany, in his death, has a cause for true grief. He was personally very popular, and during his father's life was called by all "Unser Fritz" (Our Fritz). In our issue of March 17, 1888, will be found some notes of his father's career, with which his son was so intimately blended, and the portrait of his son and successor, Prince William, will be found in the SCIENTIFIC AMERICAN SUPPLEMENT, No. 643. The latter, whom we soon may see Emperor of Germany, was born January 27, 1859, and hence will ascend the throne at a comparatively early age, prepared for a long reign.

THE INTERNATIONAL CONGRESS OF ANTHROPOLOGY.

On Monday, June 4, the International Congress of Anthropology began to hold its first annual meeting. Columbia College was the scene of the initial gathering. The congress is the outgrowth of the New York Academy of Anthropology, an organization that has been in existence four or five years. The meeting of the present year lasted until Thursday evening. The science to which the association is devoted has of late years received such extension, and its methods have been so systematized, that the new congress seems to have chosen a fitting time for organization. One of the leading papers, by Dr. Henry Maudsley, of London, dealt with the tendency in some quarters to treat criminals as insane. The paper was an earnest protest against the sentiment as applied to all criminals, and maintained that we all have within us the potentiality of crime. Yet the "essential criminal," the author believed, might be considered as mentally defective. No theories of criminal anthropology are so well proved as to justify their introduction into criminal law. Allied topics were discussed by others.

The discovery of America before Columbus was the subject of a paper by Mr. James Phinney Baxter. He presented the latest grounds for the claim of the Norsemen to the discovery. Prince Roland Bonaparte, in discussing the paper, claimed an earlier discovery by the Chinese. The subjects of alcohol, vaccination, and general topics were considered in other papers. Mr. Geo. F. Kunz exhibited some remarkable jade carvings. On Thursday, June 7, the congress adjourned to meet again in 1892. The interest throughout the session was maintained, and on the last day increased, and there is every reason to predict a long and useful future to the association.

APPARATUS FOR COOLING AIR IN THEATERS.

An apparatus has been introduced in the Standard Theater, of this city, which in a very simple way is designed to solve the problem of securing a cool auditorium in summer. A fan is placed in the basement which draws air from outside the building and delivers it through the furnace pipes and registers to various parts of the auditorium. The air before it reaches the fan is drawn over ice arranged on shelves. This cools it so that a temperature of 70° is easily attainable. While the fan situated in the basement is delivering cool air, a second fan on the roof exhausts air from the interior, thus maintaining a constant change of atmosphere. The arrangement, in utilizing the furnace connections, and in general detail, is remarkably simple, and could be readily applied to many places, such as hospitals, where coolness is all important. For a single evening's work about two tons of ice are expended.

"ARE FAST OR SLOW STEAMERS THE SAFEST?"

In the current number of the *North American Review*, the masters of the Atlantic "greyhounds" respond over their signatures to the question: "Are fast or slow steamers the safest?" and, as might be expected of seamen, every one of them engaged in an attempt to shorten the voyage, devote themselves with unanimity to commending high speed. Like Samuel Weller in the now historical case of Bardell vs. Pickwick, they remember everything favorable to their own side, but are as obscure and uncertain as the fogs they are wont to race through as to the merits of the other. The nautical reader, especially, will regret that the coasters, both steam and sail, and the Banks fishermen were not invited to speak to the other side of the proposition, for, like the question, "Is fox hunting a healthful amusement?" in which the fox's opinion differs very materially from the huntsman's, the question as to whether fast or slow ships are the safest depends a good deal upon which you are on; that is to say, from what point of view you look upon it. If the intention was to inquire into the dangers which come from a desire to make quick trips—and it would seem to have been this—another form of question suggests itself as being better calculated to produce the required result—such, for instance, as this: Is it not unsafe as well as unlawful to run at full speed in foggy or thick weather?

We don't have to go to the mariner to learn whether or no fast ships are safe. The record shows beyond peradventure that they are, when they are run in clear weather. But the record doesn't say how many slow vessels have been run down by fast ones during thick weather, or how soon we may expect to hear of a dreadful accident as the direct result of the wanton violation of the international sailing directions. Surely the experienced navigators who framed these laws had some good reason for insisting that steam vessels should slow down while running through the fog. It is not so long ago when the Clyde Maritime Association, made up of experienced steamship builders, rejecting the claim set up by the officers of the Cunarder Oregon that she was run into, decided that, on the contrary, she got her fatal injuries by striking a sailing vessel while running at full speed in thick weather.

Here is the gist of what the masters of the fast boats say:

Captain Brooks, of the Guion steamer Arizona: "If you have a danger to encounter, the sooner you get over it the better; and if one steamer takes seven and another ten days to cross the Atlantic, it is evident that you have three more days of risk on the slow ship." He would run fast in the fog because the ship going the fastest gets the least injury.

This is all very well for the Arizona, but not so well for smaller vessels that may be in her track; and what is likely to be the consequence when she may happen to strike a ship of her own weight running at the same rate, or a lighter one that has a still greater momentum?

Captain Perry, of the White Star steamer Britannic, says that, after forty years' experience, he has concluded that, in a collision between two ships at sea, he'd liever be on the faster one; but in striking ice or rock he would prefer to be going slow.

Captain Murray, of the Guion steamer Alaska, says you can run out of a storm quicker with a fast ship than a slow one, and mayhap save a daylight or a tide in entering port by the difference of time between a fast ship and a slow one.

The master of a ship that had been running slow through the fog might very reasonably respond to this that he was as likely to strike daylight or a high tide, on sighting port, as if he'd been running faster.

Captain McMickan, of the Cunarder Umbria, says he believes in slowing down in thick weather.

A glance at his uninterrupted series of fast trips shows, however, that he doesn't practice what he preaches, or else that there is never any thick weather at sea when he's afloat.

Captain Lewis, of the Inman line City of Chester, says: "A steamer that goes nine knots in fine weather would find it hard to keep her head up to the gale in boisterous weather, especially if lightly loaded, and would be in danger of falling into the trough."

But if she were capable of making 18 knots, and with full head of steam on could only then eat into the gale, she would not be "going fast in thick weather," and consequently not be endangering human life so far as reckless speed was concerned.

Captain Kennedy, of the White Star steamer Germanic, deplores the fact that while speed on the ocean has increased, the science of sound signaling, so important in preventing collision, has not advanced, and he thinks that if a good system of sound signaling was in use, there would not have been any collision between the Britannic and Celtic.

Captain Frangeul, of the French line steamer La Bourgogne, says: "My opinion is that while extremely fast ships lessen the duration of dangers, they augment their number."

This is the most striking remark in the whole series of interviews, and it is obviously true.