

Largest and Smallest Books.

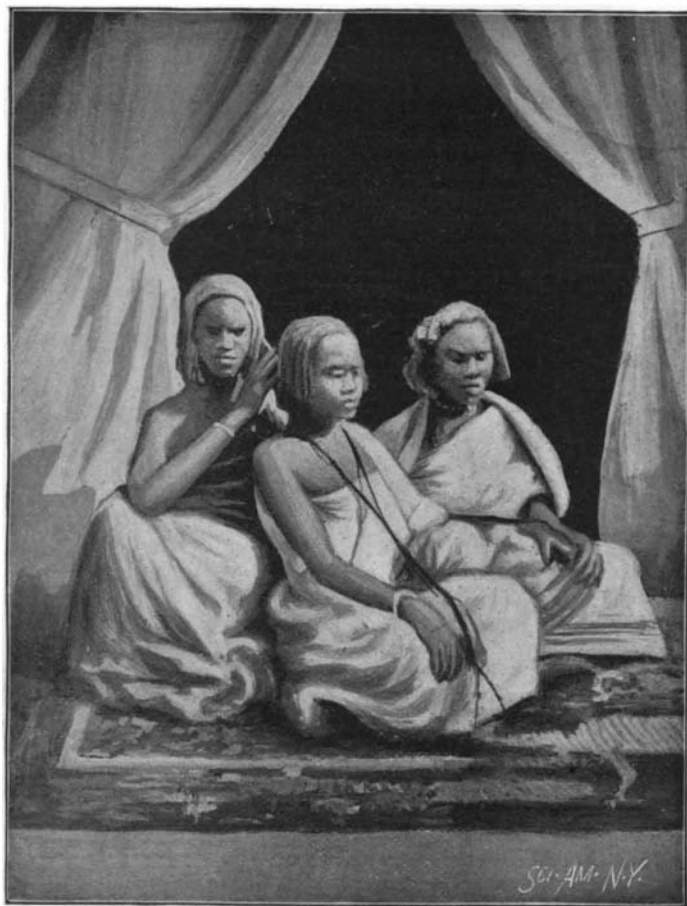
Prof. Max Muller, of Oxford, in a recent lecture, has called attention to the largest book in the world, the wonderful "Kuth Daw." It consists of 729 parts in the shape of white marble plates, covered with inscriptions, each plate built over with a temple of brick. It is found near the old priest city of Mandalay, in Burma, and this temple city of more than seven hundred pagodas virtually makes up this monster book, the religious codex of the Buddhists. In accordance with the three parts of which it is composed, generally called in a figurative sense "baskets" (pitaka), the whole is often termed "the three baskets" (tripitaka), and constitutes a library larger than the Bible and the Koran together. As the Jews figured out that the Old Testament contained 59,493 words and 2,728,100 letters, so the Buddhist priests have computed that the "Tripitaka" contains 275,250 stanzas and 8,808,000 syllables. This monster book is written in Pali. Rather strange to say, it is not an ancient production, but its preparation was prompted by the Buddhistic piety of this century. It was erected in 1857 by the command of Mindwin, the second of the last kings of Burma. As the influence of the tropical climate has already marred the inscriptions, a British official, Mr. Ferrars, proposes to have these 729 plates carefully photographed, and asked that the government, or some friend of science able to do so, make provisions for this. Prof. Muller urges that this be done in order to preserve at least the pictures of this unique temple-city book.

A noteworthy contrast is furnished by a recent German literary journal describing what is probably the smallest book in the world. This is a "Konversationslexikon," published in Berlin, and prepared by Daniel Sanders. The volume occupies the space of only six cubic centimeters (0.366 cubic inch), although it is claimed to contain 175,000 words. The book must be read through a microscope especially prepared for it.—Mining and Scientific Press.

ENGLAND AND THE SOUDAN.

For the accompanying pictures of Soudanese women and warriors, reproduced from photographs by Dr. Jousseau, we are indebted to Le Monde Illustré. The Soudan includes, in a general way, all the territory south of Nubia and the present British possessions in Egypt to the equatorial lakes, and from the Red Sea on the east to the desert on the west. It is estimated to have a population of from five to seven millions, and is ruled over by the Mahdi, whose seat of government is at Omdurman, and whose lieutenant, Osman Digna, has made frequent raids into the English territories in upper Egypt. To strengthen and possibly advance their frontier, a British expedition of some 9,000 native Egyptian troops, and a contingent of British soldiers, is now advancing up the Nile, although it is not expected that the most serious part of the campaign will begin until September or October, when the rise of the Nile will permit the carrying of supplies for the troops up the river in boats. It is said the dervishes all the time have some fifty thousand men under arms—a force which they could vastly increase without trouble, did mere numbers seem desirable. Famine, disease, the slave trade, and war among the tribes of the Soudan are reported to be thinning out the population.

H. MOISSAN describes two new metallic borides, says the Comptes Rendus, obtained at a temperature of 1,200° C., nickel boride, NiBo, and cobalt boride, CoBo. Both occur in brilliant prisms several millimeters in length and are magnetic. Their densities at 18° are about the same—nickel boride, 7.39; cobalt boride, 7.25. The properties of the borides are analogous to those of iron boride, and the compounds

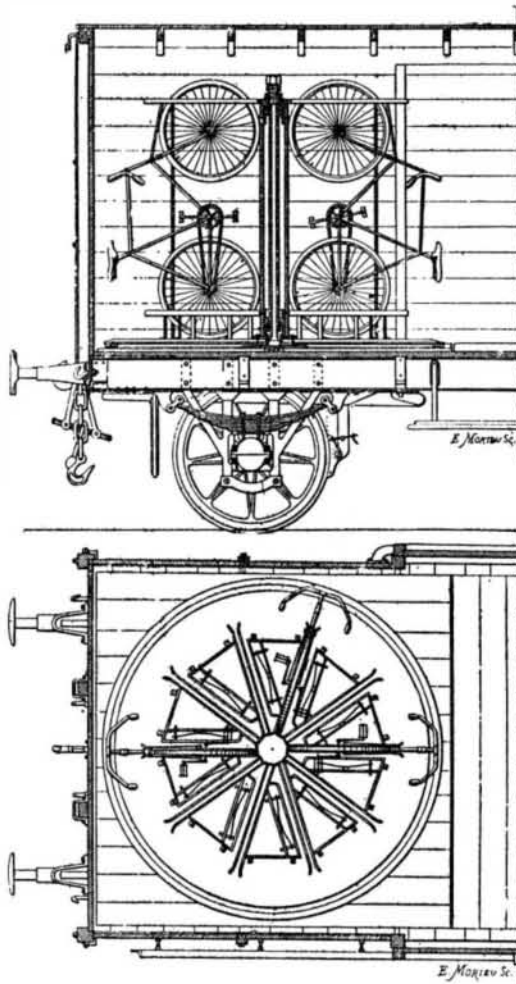


TYPES OF WOMEN AT KHARTOUM.

serve for the introduction of boron into a metal such as iron when at a high temperature. It has been demonstrated that both boron and silicon can displace the carbon in molten iron when added in suitable form.

THE CARRIAGE OF BICYCLES BY RAILWAY.

Among the numerous systems of carrying bicycles by railway, now proposed or put into practice, one of the most ingenious is certainly that devised by Mr. J. Oller, and which is at present on exhibition at the third Salon du Cycle at the Palace of Industry, Paris. The apparatus, which is represented herewith, con-



APPARATUS FOR THE CARRIAGE OF BICYCLES ON RAILWAYS—ELEVATION AND PLAN.

sists essentially of a turn table capable of receiving ten bicycles arranged vertically around a central pivot from which they radiate and are held in place by two series of forks, which embrace, respectively, the fore wheel above and the hind wheel below. One of the branches of the fork is stationary, while the other, mounted upon springs, is capable of receding from the first through the pressure of the pneumatic tire, which the springs hold in place in such a way as to prevent any tossing about. As a further measure of precaution, the bicycle is held by a strap that passes

through the frame near the handle bar. The turn table that supports the apparatus is mounted upon rollers and revolves around the pivot, so as to present to the employe in charge either an empty receptacle or the bicycle that is to be removed from the support.

The bicycles thus stowed away are perfectly independent, and well arranged for easy approach when the time comes for putting them off the car. An ordinary baggage car is capable of receiving two of these movable apparatus, say twenty bicycles, and yet leave a free space between them for two bicycles or two tandems. These apparatus may also be placed upon trucks or open cars during fine weather, when a crowd of bicyclists is anticipated upon a holiday.

The same arrangement, mounted upon an ordinary truck, will furnish the ideal vehicle for a system of bicycle transportation analogous to that used in large cities for the carriage of pianos. A special truckman with this apparatus will be able to deliver unpacked bicycles either to private parties, on the account of railway companies or of cycle manufacturers, or to railway stations.

We do not dare to assert that the apparatus under consideration affords a complete solution of the problem of stowing away bicycles upon cars, says La Nature, but, with the present form of machines and their handle bars, we know of none more simple and practical.

Intoxicated Wasps.

Concerning his observations of wasps which are addicted to the use of intoxicating liquors, Lawson Tait relates the following:

"I have been watching the wasps with great interest and have noticed the avidity with which they attack certain fruit when fully ripe, rotting in fact, and I have also noticed some of the peculiar results of their doing so. The sugar in some fruits which are most attacked by wasps has a tendency to pass into a kind or kinds of alcohol in the ordinary process of rotting, a fact which is easily ascertained by the use of a still not large enough to attract the attention of the excise authorities. On such fruits, particularly grapes and certain plums, you will see wasps pushing and fighting in numbers much larger than can be accommodated, and you will see them get very drunk, crawl away in a semi-somnolent condition, and repose in the grass for some time, till they get over the 'bout,' and then they will go at it again. It is while they are thus affected that they do their worst stinging, both in the virulent nature of the stroke and the utterly unprovoked assaults of which they are guilty. I was stung last year by a drunken wasp, and suffered severely from symptoms of nerve poison for several days. In such drunken peculiarities they resemble their human contemporaries."—Registered Pharmacist.

Niagara's Power Transmitted to New York.

A model of Niagara River, the power house, the town and the discharge tunnel will be exhibited at the National Electrical Exposition to be held in New York in May. The model is 12 feet by 4. The turbines will be run for a time each evening with electricity generated at Niagara Falls and transmitted to New York by two copper wires of the Western Union Telegraph Company. Telephones will be connected with instruments at Niagara, so that the roar of the falls may be heard. It is also said that some steps are being taken to deliver some of the current to condensers connected with an Atlantic cable, so that the power of Niagara may be transmitted to Europe.

DR. HOLDEN, of the Lick Observatory, has received the decoration of the Order of Bolivar (of Venezuela) for his disservices to science. He has previously received the decoration of commander of the Ernestine Order of Saxony.



SOUDANESE WARRIORS.