What Load Will Ice Bear?

The army rules are that 2 inch ice will sustain a man or properly placed infantry; 4 inch ice will carry a man on horseback or cavalry or light guns; 6 inch ice, heavy field guns, such as 80 pounders; 8 inch ice, a battery of artillery, with carriages and horses, but not over 1,000 pounds per square foot on sledges, and 10 inch ice sustains an army or an innumerable multitude. On 15 inch ice railroad tracks are often laid and operated for months, and ice 2 feet thick withstood the impact of a loaded passenger car after a 60 foot fall (or perhaps 1,500 foot tons), but broke under that of the locomotive and tender or (perhaps 3,000 foot tons).

Trautwine gives the crushing strength of firm ice as 167-250 pounds per square inch. Colonel Ludlow in his experiments in 1881 on 6-12 inch cubes found 292-889 pounds for pure hard ice and 222-820 pounds for inferior grades, and on the Delaware river 700 pounds for clear ice and 400 pounds or less for ice near the mouth, where it is more or less disintegrated by the action of salt water, etc. Experiments of Gzowski gave 208 pounds; those of others 310-320 pounds. The tensile strength was found by German experiments to be 142-223 pounds per square inch. The shearing strength has been given as 75-119 pounds per square inch. The average specific gravity of ice is .92. In freezing water increases in volume from 1-9 to 1-18, or an average of 1-11; when floating 11-12 is immersed.—Engineering Mechanics.

Boiled Water and Impurities.

It is generally believed that the most impure water can be rendered pure by boiling and that in this we have an absolute safeguard against the dangers of water containing disease germs. Now, while it is true that boiling will kill the germs of disease, yet the fact has been brought to our notice by so high an authority as Dr. Charles M. Cresson that, while boiling kills the germs of a particular disease, it yet in reality renders the water more impure than it was before, because by the very death of these germs dead organic matter is allowed to remain in the water, which it pollutes by putrefaction. Hence, while boiling is a most excellent precaution against the occurrence of typhoid fever or similar diseases when we have occasion to think the germs of these diseases exist in the water that we drink, yet we must remember that this boiling does not purify the water. It simply removes from it the specific power to produce a specific disease.—Philadelphia American.

Cheap Toothbrushes.

"These are 20 cents and as good as any I have," said the druggist, handing out half a dozen toothbrushes that looked like all the other toothbrushes in the showcase save for some small Japanese characters on the handles.

"Yes," said the druggist, "they are made in Japan, and they compete successfully with the French toothbrushes. I've plenty of the latter if you like them better."

Twenty cents, as a matter of fact, is no longer a low price for a toothbrush, save perhaps at a drug store. Knowing folk, especially women, buy such articles at the large department stores or at special shops, but never at drug stores. It used to be that careful persons thought 35 cents rather a dangerously low price for a toothbrush, and many persons habitually paid 50 cents. Good looking toothbrushes are now sold at 10 cents, and some that persons accustomed to use good articles do not hesitate to buy are sold by the half dozen as low as 7 cents each. You may buy French toothbrushes at seemingly very low rates, and prices of all kinds seem to have fallen, perhaps through Japanese competition, perhaps from other reasons. The Japanese have closely imitated the French toothbrushes and are sending great quantities of the article to this country.—New York Sun.

BRIEF PERSONALS.

A. L Sibert is in New York on business.

M. Rosenburg is in Baltimore on business.

H. J. P. Kello, of Crewe, was in the city yesterday.

A. C. Zerbee went to Montvale yesterday on business.

E. O. Kenson, of Coeburn, Va., is in the city on business.

S. W. Patterson, of Lynchburg, was in the city yesterday.

Wood Brown has opened a tailor shop at 133 Salem avenue.

S. B. Younger, of Lynchburg, was here yesterday on business.

Jas. D. Johnston left yesterday for Pearisburg on business.

R. H. Sigman, of Iager, W. Va, is a guest at the St. James.

C. R. Moir returned yesterday from a visit to Patrick county.

W. L. Barnett, of Allegheny Springs, was in the city yesterday.

Miss Lettie Collins, of East Radford, was in the city yesterday.

G. M. Berlin left last night for New York to be gone several days.

D. F. Shea, of Martinsburg, W. Va, is registered at the St. James.

I. Silverstone left yesterday for a business trip to Northern cities.

Col. J. W. Hartwell left last night for Lynchburg on legal business.

Mrs. Daniel DeJ. Staples is quite ill at her home on Seventh avenue s. w.

Officer Gee went to Lynchburg yesterday to atttend United States court.

Deputy Marshal J. E. Greene is in Lynchburg attending United States court.

Wm. McComb, of New York, is in the city, accompanied by his wife and mother.

Claude Langot and wife, of Williamson, W. Va., are registered at Hotel Roanoke.

Frank P. Harman, president of the Turkey Gap Coal and Coke Company, is in the city.

Mrs. Thomas Boisseau, of Dinwiddie county, is visiting her sick son at 423 Sixth avenue s. w.

Henry Goldstein has returned to his home in Newport News after spending a few days in the city.

Jno. T. Trout, receiving teller of the First National Bank, is ill at his home on South Jefferson street.

Miss Bessie Nowlin, of Little Rock, Ark., is in the city visiting the Misses Webb at 627 Salem avenue s. w.

Mr. and Mrs. H. C. Stuart, of Elk Garden, are at Hotel Roanoke on their return home from a bridal trip East.

Marshal G. W. Levi, of Berryville, was in the city yesterday and went to Lynchburg to attend United States court.

Hon. R. Palmer Hunter, brother of Mrs Rev. J. C. Dinwiddie, who is now at his bedside in Campbell county, is reported better.

Mr. and Mrs. Indorsky and little daughter have returned from a Northern business trip, where they purchased a fine line of spring millinery.

General T. T. Munford returned to his home in Lynchburg yesterday after a pleasant visit to his daughter, Mrs. J. Wm. Boyd, on Franklin road.

Misses Lillie Nicholas and Ethel Stokes, of Danville, Va., who have been visiting the family of E. R. Woodward, left yesterday for their homes.

E. J. Easton, of the United States and Europe, who has been spending the winter in Roanoke, left for Richmond yesterday, where he will stop several months.

Died of Paralysis.

DENVER, N. H., March 9.—Chief Justice Charles Doe, of the supreme court of New Hampshire, was stricken with paralysis in the depot at Rollinsford to-day and died almost immediately.

MENELEK'S HANDSOME QUEEN.

Her Masterful Ways, Her Influence Over the King and Her Taste In Wines.

In a letter on affairs in Abyssinia the Rome correspondent of the Paris Figaro gives this description of King Menelek's helpmate:

"Queen Taitou was spoken of recently as wanting to lead her troops to the assault of Makalle. 'Taitou' means light, or sunlight. She is descended from an ancient and noble family, originally from Samien. She is well formed, with regular features, except for a little defect of the mouth, which she endeavors to conceal when she speaks. Her skin is a clear brown. Her eyes are black, large and expressive. Her feet are small, and her hands are aristocratic, just as are her manners in general. She dresses in the Ethiopian fashion, with a great deal of taste and elegance. She wears on her neck, her wrists and around her ankles ornaments of gold, artistically worked. According to circumstances, the expression of her eye is benevolent or scornful or fiendish. She belongs to that class of women with whom it is well to be on good terms. Woe to him who becomes her enemy who doesn't know how to appreciate her protection. Even the king himself would not risk the defense of a friend against the resentment or vengeance of this proud and stubborn woman. Wearing all the outside appearance of a weak and submissive creature, she knows how to impose her will, and when she wishes to obtain anything she works for it with passion. She would spend days, months and even years in the pursuit of her object, and she always gains her point. She is thoroughly acquainted with all the state secrets and insists upon knowing everything that the king does and everything that he writes. She gives counsel and dictates important letters.

"The queen's pride and her mania for meddling with everything have made numerous enemies for her, and she might be an object of pity if the king should die before her, because in that event she would be in danger of being stoned to death. She knows this very well, and as a precautionary measure she has accumulated immense riches in the country of Godjam, where she intends to take refuge in case she becomes a widow. She likes most European liquors, especially French champagne, but doesn't care for the sweet wines of Italy, which were brought to her by Makonnen on his return from Rome. Sometimes she takes too much, and in such cases she might perhaps be more charming to her husband than to her outside admirers."

Lawyers, of All Men, In Good Luck.

"The lawyers are the best commemorated men of the community," said a Maine jurist, "for the state provides a record of their work in its reports of decisions, with the names of counsel and synopsis of arguments, that is practically imperishable. Not only are these books stored up in Maine libraries and in the hands of practicing lawyers, but they may be found all over the country. They are not only for today, but for all time. Indeed we cannot suppose a period in the world's future when these books will not be consulted and quoted and the names of the lawyers concerned brought before the eyes of men."—Lewiston Journal.