

PART OF THIS PAGE IS MISSING

STEEL RAILS A MARVEL

The Strain, the Pull, the Pounding and Grinding They Endure.

Have you an idea of the strain to which a steel rail is subjected today? Let us consider one for a moment in the time of its greatest torture and see. The Cannon Ball express is coming. It is drawn by two engines. The largest weighs 100 tons. Seventy-seven tons of the weight are carried on the six driving wheels, which means almost thirteen tons to a wheel. Thirteen tons of weight upon each wheel! That means thirteen tons of weight impinging for a flying instant upon a rail surface perhaps no more than an inch square and then moving forward all the time, a succession of whirling blows from a thirteen ton hammer.

If the train is going thirty miles an hour an imaginary square inch has but one five-hundred-and-twenty-eighth part of a second in which to receive the blow, wince under it, distribute the terrible force of it through its elastic elements to the surrounding mass of the rail, brace itself to help distribute stresses that are being set up on adjacent surfaces and signagging back and forth in all sorts of ways through the content of the rail and then almost instantly lift its devoted head to receive the blow of the next driving wheel. If the train is going sixty miles an hour instead of thirty this all has to be received, withstood and passed on in one hundred-and-fifty-sixth part of a second.

And yet this isn't all that is happening to the nerves of the rail. This is only taking account of the compression strains. There is another set of strains, for these big driving wheels are pulling the train. They have caught hold of the rails just as your hands grip the rope in a tug-of-war, and they take a fresh hold every fraction of a second. The tendency is to pull the top or head off the rail, to pull it all to pieces. It is the business of the rail to stick together, head and web and flange, in every single and separate molecule with all the tenacity of which steel is capable.

But we have stated only one-half the tension strain. This strain is reversing all the time, for while the huge drivers are pulling one part of the rail toward them they are pushing another part away from them. This plucking and spurning, hauling and kicking, tension and compression go on continuously. Complete reversing from compression to tension or back again takes place with every half turn of a driving wheel and at a frightfully rapid rate. The marvel is that the rail is not ground to powder.—Metropolitan Magazine.

The Explanation.

Robert Henri, the artist, said in New York of a bogus "old master": "Some of these experts must be very ignorant, judging from the facility with which they are duped. They must be ready to swallow anything. It's like the Velasquez story."

"An auctioneer, you know, put up the picture, saying: 'Here we are, ladies and gentlemen—this exquisite Velasquez—'Battle of Waterloo.' 'What am I bid? One million nine hundred thousand?' 'But' interrupted an expert in a puzzled voice—'but I thought Velasquez died before the battle of Waterloo!'"

"So he did, sir," explained the auctioneer, "so he did, but this, you see, is one of dear old Velly's posthumous works."—New York Tribune.

"Barber's Music."

Barbers in the old days might well charge heavily, for theirs must have been a nerve racking existence. Zithers were provided instead of newspapers, and customers used to strum on these while waiting for a vacant chair. Dekker, writing early in the seventeenth century, refers to "a barber's cittern for every man to play on." The term "barber's music" was a common one in the days of Pepys, who on June 5, 1660, records, "After supper my lord called for the lieutenant's cittern, and with two candlesticks, with money in them for symbols, we made barber's music, with which my lord was very well pleased."—London Standard.

Curt and Concise.

A certain surly old Yankee who runs a small summer hotel on the Massachusetts coast once received a rambling letter from a prospective guest, who wrote to engage "two large sunny rooms overlooking the ocean and connecting with private bath." One may imagine the lady's surprise at getting the following curt reply: "Dear Madam—All rooms face the ocean, and that's your bath."—Lippincott's.

Considerate.

X. (an incorrigible borrower)—Lend me a fiver, old man. Y. (weakly lending him £4 19s.)—I'm keeping the other shilling to pay for the postage of the letters which I shall have to write you before I get my money back. X. (coolly)—Keep 5 shillings, then. That will give me more time.—London Tit-Bits.

Something to Try.

Tweed & Cheviot, tailors, wrote to Livingstone Liffmont as follows: "We must have something on account by Saturday next. What can we count on?" And Mr. Liffmont promptly replied, "Ever try an adding machine?"

Jarred His Dad.

Father—No, indeed! My father never and me tell a lie! Willie—Was grandpa as deaf and grandma?—Cleveland Plain Dealer.

Who love too much hate in the like extreme.—Pope.

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