TELLS HOW BIG BUILDINGS ARE MADE SAFE WHILE SUBWAY WORKERS TOIL BENEATH THEM

district, two hundred men are toiling while the pack is still in position. and sweating below the surface of the street shoring up the foundations of through Nassau and Broad streets.

most collossal of its kind ever un- ed. dertaken, for before the excavations for the new loop of the B. M. T. sub-Fraunce's Tavern.

Work in High Temperature

dermining the foundations of the mas- than a fifty-ton load. sive buildings to insert the supports, and studying the various problems

The problem that faces the engineers is that of extending the present foundations to a point below the level of the floor of the new subway. To do this each column which bears any of the weight of the building must be amply supported.

The supports which will be used in the new foundations are sectional steel cylinders varying in diameter from twelve to sixteen inches and in thickness from one-eighth to three eigths of an inch. Each column of a building is temporarily braced, and the work on one is, naturally, completed before the work on the next is story skyscraper. begun, so that the adjacent columns may support the extra strain as a particular column is undermined.

How the Task is Done

A small pit is dug under the column to be supported, and a hydraulic jack is fastened to the base of the column. Under the jack is a sectional steel cylinder is placed. The sections are one foot, two feet or four feet in tion, the hydraulic jack is put into operation

As the water is pumped into the jack, the pressure is placed equally against the base of the column and section do not have to be supported. where they renewed many old acquathe top of the cylinder. As the building cannot be jacked up because of Building and the Liberty Tower. But gifted speaker, will spend a few its weight the column remains fixed in the case of the Liberty Tower the weeks in Pennsylvania where she will and the steel cylinder is jacked down sidewalk vaults have to be supported. attend summer schools before returnthe ground. Once the jack has One of the principal difficulties in ing to her western home. been extended to its limit, the pressure is released, the jack closed up ing the sidewalk vaults. The walls of again and another section is placed some of these vaults are from six to on top of the first and forced down eight feet thick and of solid stone sunk has reached a hard surface and Monte Crisco had to pick at the stone egg. will not go down any further

The hard surface which lies below hew out a tunnel. the sand on which most of the buildings are built, is in this case known as hard-pan and consists of a disintegrated rock solidified by a natural cement of clay so that it is almost as firm as bedrock.

this hard pan lies about fifty feet be- jacks beneath the large windows. low the surface, so that each steel which would instantly be shattered. support which is sunk must be fifty feet in length

Construction Company under the the subway, supervision of the engineers of Spencer, White & Prentiss, it is impossible to find hard-pan in some places and the shafts must be sunk into the sand until they will support the required

How the Pressure is Weighed

The exact weight which each steel jack there is a gauge which registers being put at \$497,500. the pressure on the liquid within the All servants who had been three

jack. If for instance, one of the piles will salary. be required to stand a load of fifty | Another will probated today was the pile does not sink further under ed at \$2,100,000.

While half a million persons daily that pressure a steel eye beam is place are walking in and out of the sky- ed between the base of the column of scrapers in the heart of the financial the building and the top of the pile

Wedges are then inserted and driven in to secure the beam. The wedges the buildings to keep them safe while are forced in further and further until showing that the beam is taking the charge of the work to be one of the by the jack. The jack is then releas-

Where it is impossible to reach that each of these structures presents, the hard-pan, as in the case with the they are working in a heat comparable foundation work on the old Times big steam pipes that lie underneath Row, the piles will not stand more the wooden decking with which the than a forty-ton load. To make matpavement of the street has been reold Times building is of solid masonry construction and the heaviest of those which will be have to be shored up, its columns carrying a weight of 1.150 tons each, so that twenty-nine piles will have to be sunk under each of its columns. When the work is completed it will rest on hundreds of steel shafts.

Many Rest on Solid Rock

Another heavy building is the Sub-

not need to be supported

But the Mutual Life Building, the Journal, the Centennial Building and during the great war. length. When the section is in posithe two streets will have to be sup- ter motored to Moncton where she

street. Only two buildings in that they made a tour of Albert County They are the Federal Reserve Bank intances. Mrs. Robinson who is a

walls of his prison when he sought to

It is impossible to blast because of for your father. the fourteen inch steam pipe, which

Another difficulty which is found in this section is that a number of the small stores which must be shored These women! Always ruining some On the section of the job which up have no columnar supports in front thing. You've gone and made salad lies south of Liberty street and which and are only thin shells of plate glass out of my Sunday suit. is being done by the firm of Spencer Such a building would not, of course, White & Prentiss of 709 Sixth avenue, stand the pressure of the hydraulic

Altogether the work of supporting the buildings will require more than Above Liberty street, where the a year of the three years and three work is being done by the Marcus months which will be used in building

pile is capable of supporting is de- London, July 21-The will of Stantermined by what is known as the ley Weyman, the novelist, was pro-"pre-test method." On the hydraulic bated today, the value of the estate

gears in his service received a year's

tons, it is sunk in sections until the that of Sir Henry Samman, who began gauge on the jack registers seventy- as a boy on a tea clipper and became five tons, the extra fifty per cent. be- founder of several steamship compan ing an allowance for safety. Then if ies. The value of his estate was place

HAS BEEN A TRAVELLER IN MANY LANDS

Mrs. C. A. Robinson of San Francisco Renewed Old Acquaintances in Westmorland and

Dorchester, July 18-Visitors to the new subway is being driven the gauge on the pack begins to fall, Dorchester last week included Mrs. Carrie A. Robinson, of San Francisco, The task is said by engineers in weight which hitherto has been borne Cal., field representative of the Baptist Co-operative Mission Board of the United States, who journeyed here to As some of the columns of the visit her old friend, Mrs. E. H. O'Neal. building carry a weight of 1,000 tons Mrs. Robinson is a daughter of the buildings must be supported by steel and more, and as each steel pile rest-piles—among them the United States weight of Sitty town Sub-Treasury and the historic old weight of fifty tons, some of the coltwenty piles beneath them to support Baptist Alliance at Toronto last them, although in some cases each month and visited relatives in Fred-While the men are cautiously un- pile will be required to carry more ericton before coming here. Mrs. Robinson is the widow of Capt. Charles S. Robinson, an Albert County man, and for a number of years made her home in Liverpool, England. While there she was closely associated with to that of a Turkish bath, due to the building at Nassau street and Park Mrs. O'Neal in temperance and philanthropic work and a strong friendship grew up between them.

Mrs. Robinson during the early days of her married life accompanied her and has visited almost every part of the habitable globe. One of her ship-Captain Ronald Bennett, of Sackville, a brother of Hon. R. B. Bennett, leader of the Conservative party. On learning that Mrs. Robinson was visiting Dorchester, Captain Bennett motored over to the shiretown and spent several hours with her talking over A dame we would like Treasury. Although it is a low build- the old days when they roved the To put out of biz. ing, it is built of solid stone without seas together. It was while their Is the one who phones skeleton steel supports, so that it ship the Ancyra was lying at anchor weighs as much as a modern eighteen in the harbor of Valpraiso, Chili, that Mrs. Robinson only daughter first saw The Equitable Building, the J. P. the light of day, and in speaking of Morgan Building, the Stock Exchange, this important event, Capt. Bennett the Banker's Trust and the Hanover reminded Mrs. Robinson that every National Bank Building already rest ship in the harbor honored the new on foundations of solid rock and do arrival by displaying colors at the masthead. The little girl born under such auspicious circumstances is now Syndicate Building, the National Bank a graduate nurse living in San Franof Commerce, the Morris Building, the cisco and saw service in France with Telephone Company, the Wall Street the American Expeditionary Force

Mrs. Robinson, on leaving Dorcheswas joined by her sister, Mrs. R. P. The hardest job lies above Liberty Allen, of Fredericton, and together

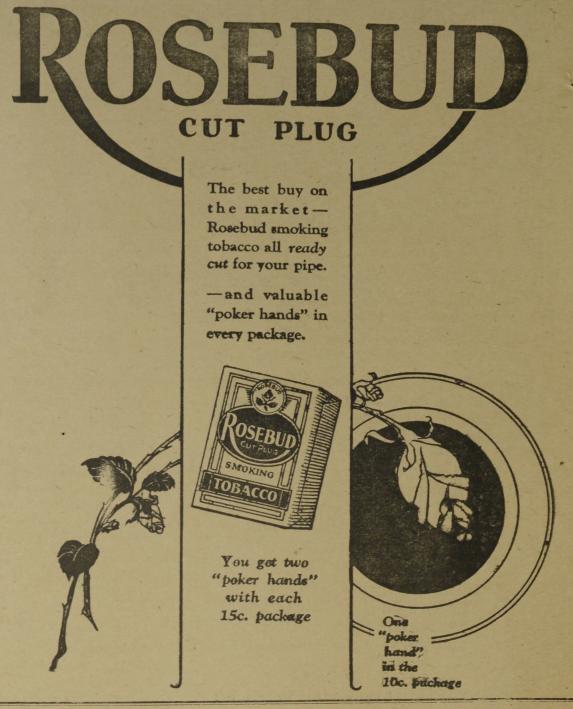
"They ought to; she used to be into the earth, until the first section construction. These must be picked the toast of the town and he's an

Tommy-I have the utmost respect

Tess-Don't tell him. He's kind of half scared of you now.

Adam (to Eve)—Good heavens!





"Guess who this is."-Buffalo News

Another fresh fish Is the guy whose stenographer Puts through the call.

Well, anyway the 33-inch stocking | Many a man who yells loudly for that over all.

Dr. Copeland says people are in great danger of forgetting they have legs. Huh! The girls will never again let us forget theirs.

will never become popular with the liberty goes out and pays \$2 for a girls who aren't much longer than license that takes it away from him.

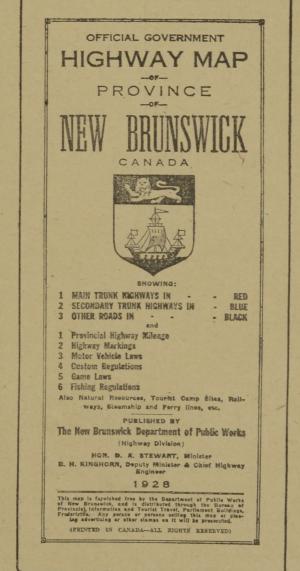
> ple who didn't expect to travel will become half crazy to go somewhere. It must give the modern heathen a good laugh when some of the mis-

sionary barrels are opened these days.

If a train service is interrupted peo-

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