

The fox (knowing the force of publicity) "barks not when he would steal the lamb." In these days any business venture which fights shy of advertising is open to natural suspicion.

DESERET EVENING NEWS.

Job said: "The ear trieth words as the palate tasteth meat." And in these days of printing, and of advertising, the word "eye" may be substituted for "ear."

TRUTH AND LIBERTY.

SATURDAY, MARCH 25, 1905. SALT LAKE CITY, UTAH.

FIFTY-FIFTH YEAR.

PART TWO.

The Saturday "News" Special Foreign Service.

A HINDOO WIDOW BURNED TO DEATH

Gruesome Evidence that the Horrible "Suttee" is Still Practised.

HOW THE RITE IS CARRIED OUT.

Relatives of the Deceased Start Blaze That Reduces to Ashes Both the Living and the Dead

SPECIAL CORRESPONDENCE.
BOMBAY, March 15.—Despite all efforts of the Indian government to stamp out the horrible practice of burning widows alive on the funeral pyres of their husbands, in remote districts the "suttee," as the fanatical rite is called, is still practised occasionally with all the accompanying ceremonies prescribed by ancient traditions. Of this a gruesome instance has just come to light which shows, incidentally, that the atrocious sacrifice is still regarded as a praiseworthy act of piety by many Hindus, and but for the heavy restraining hand of British authority would probably again become common.

WIDOW A SACRIFICE.

A while ago, Chaudhri Missir, a Brahman who had held firmly to the faith of his fathers, died in the village of Sanchari, situated in a district where the occasional visits of the tax collector are the only evidences of foreign domination with which the inhabitants are acquainted. His relatives wished to give him an old-fashioned funeral, worthy of one who had been so scrupulous in the observance of all the ceremonial of his religion, and his widow, apparently, was nothing loath to offer herself as a sacrifice. Arrangements were accordingly made for the cremation together of the living and the dead on the banks of a small river. Some ground was staked off in the form of a St. Andrew's Cross on which the funeral pyre was built. After the body of the dead man had been laid upon it the widow bathed in the river and then, adorned as for a bride, seated herself on the pyre alongside of her husband's corpse and called upon her son, Juggernath Missir, to perform his filial duty as a devout Hindoo.

GREAT CROWD PRESENT.

In the presence of a vast crowd which had assembled Juggernath lighted some wheat stalks, and after walking three times around the pyre applied the lighted ends as custom prescribes, to the mouth of the dead man. This failed to ignite the pyre, however. Then four Brahmins, Balkishun Missir, Dwarka Missir, Rann Charan Missir, and Lachman Tewari—the three former near relatives of Chaudhri Missir—performed the "Humad." This consisted in the burning of incense and the placing of lighted chips of wood that had been dipped in melted butter beneath the pyre. Meanwhile the widow, seemingly absorbed in a pious ecstasy, gave no sign of fear. Just before the flames reached her, she stood up and turned to the setting sun, but immediately fell back on the pyre apparently overcome by the heat and smoke. If in her agony she uttered any cries they were drowned by the shouts of the fanatical crowd, the clashing of cymbals, the beating of drums and the tooting of the Sank shella. And thus her ashes mingled with those of her husband.

GOT WIND OF IT.

The authorities got wind of the affair and started an investigation. They were met with point blank denials that there had been any cremation either of the living or of the dead. Perjury has been reduced to a fine art in India and in such a case, lying is accounted as righteousness. But from the contradictory testimony of unwilling witnesses the astute agents of the government succeeded in getting at the substantial facts of the case. Juggernath Missir, the filial son, was sentenced to five years' imprisonment; the Lachman Tewari, one and a half years; and a coach driver and a couple of drummers will spend nine months in jail. They will all be regarded as martyrs when they regain their freedom, but not for many years will another widow be burned at Sanchari or the district round about.

MARCONI'S PRAISES.

London Cor. New York Sun.—William Marconi, the wireless telegraph expert, in a lecture before the Royal Institution announced an invention of great importance to the efficiency of his system, which has hitherto been hampered by inability to receive more than 24 words a minute, and this only by means of a telephone attached to the receiver. By this method no documentary record of messages was made. Mr. Marconi said: "I have been able recently to construct a magnetic detector which will work a relay, enabling the ordinary Wheatstone relay to be replaced by a far simpler and more reliable device. The principal advantage is, however, that the receiving speed is increased from 24 to 100 words a minute." Mr. Marconi hinted at further improvements in receiving that he is elaborating in conjunction with Prof. Fleming.

SPECIAL CORRESPONDENCE.
BERNE, March 15.—Piercing the heart of the mighty Alps in a bee line for twelve and a quarter miles, the Simplon Tunnel, the longest in the world and the greatest underground engineering feat ever undertaken, is now nearly completed. Last week the Swiss and Italian borings were successfully united, and it is con-

Digging Underneath a Mile of Solid Rock

In a Few Weeks the Simplon Tunnel, the World's Greatest Feat of Underground Engineering, Will be Practically Completed—Fierce, Internal Heat, Subterranean Torrents and Boiling Springs Among the Obstacles.



CHIEF ENGINEER
HUGO VON KAGER

idently expected that within a few months trains will be running—passing under millions of tons of solid, snow-capped mountains, with the rock in places considerably over a mile thick above the tunnel roof.

The obstacles encountered have been many and stupendous. Nature has opposed with all the might of her subterranean forces the invasion of the intrepid human burrowers. Landslides have intervened to stay their advance. Heat has done its best to baffle them. Imprisoned streams, cold springs and hot springs, have burst forth from the bowels of the earth, discharging sometimes from 10,000 to 15,000 gallons a minute to overwhelm and destroy them. These things have greatly retarded the progress of the engineers, occasionally causing them to halt for weeks while they summoned fresh powers of science to their aid; at other times reducing their advance by boring and blasting to a few inches a day. But never were they beaten; never did they deviate by a hair's breadth from the straight course that had been mapped out for them.

SUBDUING A BOILING FLOOD.

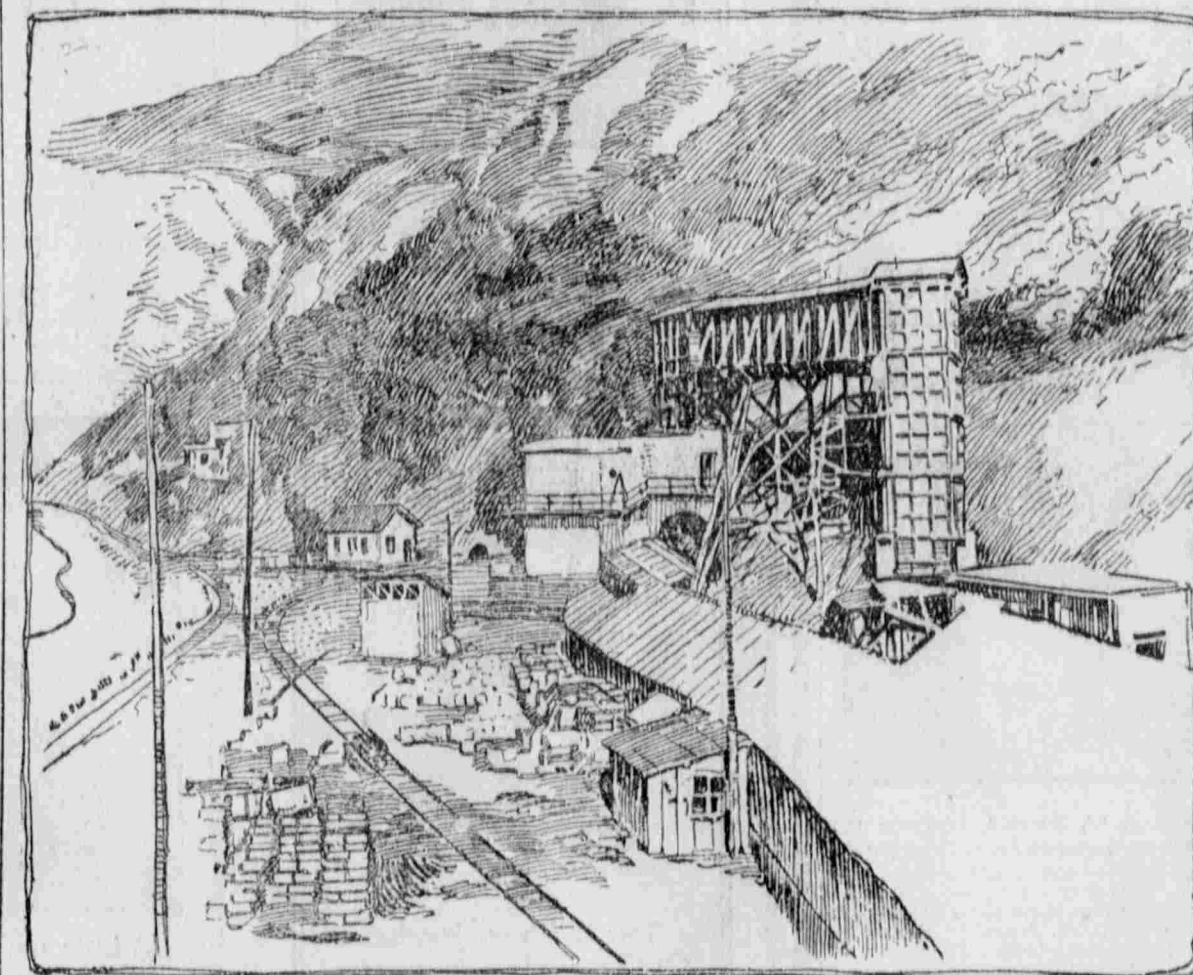
Last October, when only two hundred yards separated the Swiss and Italian sections, the pent-up forces of old earth, as though bent on a last supreme effort to put an end to the attacks of dynamite and hydraulic drill, let loose a "boiling flood." That was how it was described at the time, though to be precise the temperature of the water was 133 degrees Fahrenheit—quite sufficient to put a stop to human labor when the rate of flow was several hundred gallons a second. In many quarters it was gloomily declared that the work would have to be abandoned, and that six years of incessant labor and millions of dollars had been wasted. It was darkly hinted that the center of the mountain was a great "molt-en mass," through which nothing could penetrate.

The hot spring was several degrees hotter and much greater in volume than any that had been previously encountered. Its outburst at this spot had not been expected. But little did the laymen appreciate the skill and perseverance of the engineers directing the work. They proved fully equal to grappling with the situation which had been deemed so terrifying. None of the water from the hot flood reached the workmen until it had been diluted with cold water from the hydraulic mains. At the same time the temperature of the air was cooled some 25 degrees by means of a high pressure water spray. And after a while the men were able to continue their tasks in a comfortable sort of shower bath. As for the "molt-en mass," that, of course, turned out to be a geological myth.

In the building of the Simplon forces of nature, harnessed and controlled, have been employed to combat other forces of nature, wild and rebellious or ponderously passive. Water derived from the Rhone on the Swiss side and the foaming Diveria on the Italian has supplied the power that has driven the hydraulic drills through the adamantine rock, subduing and diverted the subterranean floods and forced into the tunnel the fresh air and cooling spray from glacial streams, which have rendered work possible in what would otherwise have been a suffocating inferno.

THE CROWNING TRIUMPH OF SCIENCE.

But the crowning glory of the



THE WORKS AT THE SWISS END OF THE SIMPLON TUNNEL.
The Wooden Tower in the Picture is a Temporary One for Connecting the Ventilating Plant with the Tunnel.

achievement lies in the success of the measures adopted for safeguarding human life and health under conditions of deadly and stupendous peril.

The St. Gothard tunnel, three miles shorter, and where the natural obstacles encountered were far less serious, claimed a toll of 600 lives, of whom 400 perished of pneumonia or "tunnel worm," and 200 were killed by explosions or crushed to death by passing trucks or falling rock. In the construction of the Simplon tunnel not one single case of miner's phthisis has occurred among the 3,000 laborers engaged in the borings, while only a dozen men have been killed at the work during the more than six years that they have been in progress.

Just as the terrible slaughter in the far east affords a measure of the progress of science applied to warfare, so the immunity from disease and small loss of life that has occurred in the making of the longest and deepest tunnel in the world reveals the advances made by science linked to industry. Truly peace hath her victories no less renowned than war.

The first of the Alpine tunnels, the Mont Cenis, seven and a quarter miles long, began in 1857, took 13 years to complete, the average cost being \$1,100 for every yard of its length. The second Alpine tunnel, the St. Gothard, nine and a quarter miles long, was begun in 1872, and eight years later the borings met with wonderful exactness, the cost being \$710 a yard. The third tunnel, the Arlberg, running in a perfectly straight line for six and a third miles under the Arl mountains, afforded still more striking evidence of engineering progress. Begun only five months after the successful junction of the St. Gothard borings its cost was only about \$500 a yard and it

was completed in three years, the average rate of advance being three times as fast as at Mont Cenis and nearly twice that of the St. Gothard.

Immediately upon the successful termination of the Arlberg the scheme for the Simplon tunnel was broached and the Swiss and Italian governments were petitioned for the necessary consents and concessions. But so colossal seemed the undertaking that ten years elapsed before the project crystallized and another 13 years before the conventions were guaranteed on both sides. Work was actually begun on the tunnel two years later, operations being started simultaneously from the Swiss and Italian sides.

The difficulties of the undertaking were enormously increased by insistence on the perforation of the mountain at a comparatively low altitude instead of at a high altitude, which would admit of a much shorter tunnel. It is, of course, obvious that the higher up a mountain a tunnel is driven through it the steeper must be the approaches to it. It was decided that the tracks of the Simplon tunnel should not be carried to a greater altitude than 2,310 feet, the Swiss entrance at Brigue being 2,350 feet and the Italian one at Iselle 2,070 feet above sea level. The increased length of tunnel re-

ventilating shaft for the other. The twin perforations have been pushed through simultaneously, but only one, that on the eastern side, has been hewn out to its full dimensions. Until the traffic demands a second track No. 2 tunnel will serve merely as a ventilating shaft. While the work of excavation has been under way this subsidiary tunnel has served also as a drain to carry off the great floods that have gushed from the interior, to transmit in mains the glacial water needed to cool the air and the heated surface of the rock and dilute the hot springs. Other mains have conveyed the high pressure streams to work the hydraulic drills. Water, that great miracle worker of nature, which in countless aeons of time has hewn out that most stupendous wonder of earth, the Grand canyon of Arizona, has been the chief agency in the accomplishment of this greatest twentieth century feat of engineering.

By water-power driven fans pure Alpine air is forced into the tunnels at the rate of 60,000 cubic feet a minute. The hydraulic power which works the Brandt drills is obtained for the Swiss cutting by gravity from the Rhone, the water being brought down from a point three miles higher up the valley. At the works turbines of 2,225 horse power each generate and transmit

bersome carriage. The Brandt drill has rendered possible a rate of progress never before attained in similar tunnel borings, frequently averaging 10 yards a day.

Another ingenious invention of Mr. Brandt employed in the Simplon tunnel is a compressed air gun of six and a half inches caliber and 300 feet in length, which discharges a projectile containing 900 gallons of water. It is fired simultaneously with the explosion of the dynamite cartridges in the holes made by the drills. This great volume of water, impelled with tremendous force, pulverizes and sweeps away the debris, preventing that accumulation of dust which plays havoc with miners' lungs.

Never before has an engineering work of such magnitude been attended by such careful provisions for the safety and comfort of the men. To obviate the risks of pneumonia, dressing halls are provided at either entrance. On emerging in train loads from the galleries the men are compelled to enter these apartments, ready heated for their reception, and to stay in them for half an hour, while the temperature is gradually cooled down to that prevailing outside.

UNDER A MILE OF SOLID ROCK.

Notwithstanding that the difficulties to be overcome were obviously so much greater, it was expected that the improved methods adopted would admit of more rapid construction than in the St. Gothard tunnel. The contractors undertook to complete the first single

HE WROTE CHILD'S BEST LOVED HYMN.

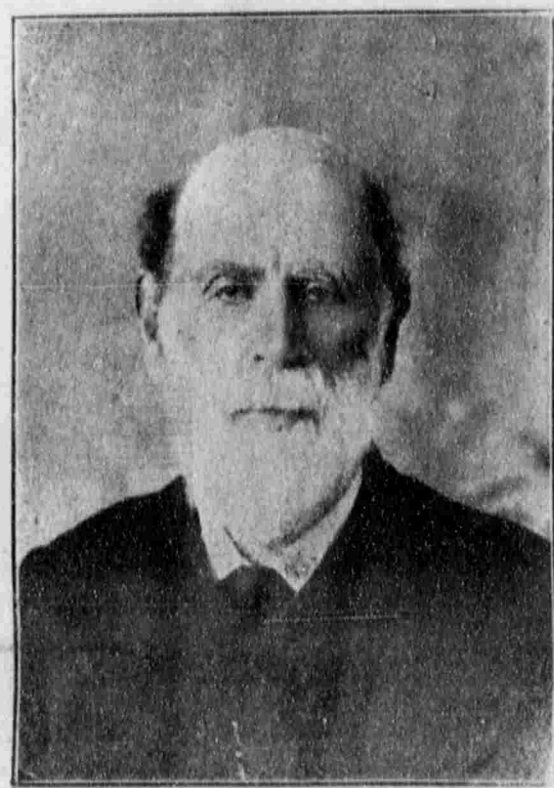
Albert Midlane Who Composed "There's a Friend for Little Children."

HALE OLD MAN OF FOUR SCORE.

Song Has Been Translated Into Every Tongue and is Sung Over All the World—Simple, Happy Life.

SPECIAL CORRESPONDENCE.

LONDON, March 15.—Translated into every tongue and sung the world over wherever Christianity has penetrated, "There's a Friend for Little Children," published over 40



ALBERT MIDLANE.

Author of the Famous Hymn "There's a Friend for Little Children."

track tunnel, the parallel heading and the approaches to either side in five and a half years at a cost of \$14,000,000. But human intelligence cannot forecast with exactitude the conditions that exist over a mile underground.

In the last 600 feet of the Swiss advance no less than 13 hot springs were encountered. After exceedingly powerful pumps had been installed to cope with them, there occurred a great Alpine storm followed by a landslide. This cut off the water supply at the intake, stopping the motive power of the machinery at Brigue, upon which depended the ventilation, refrigeration and drainage of all the tunnel workings on

years ago, still remains the favorite hymn of the young. Its author, Albert Midlane, a hale, benign, sunny old man who celebrated his eightieth birthday a few weeks ago, lives at Newport, Isle of Wight, where he has dwelt and labored all his days. He has written for me a verse of the famous hymn—a facsimile of which is here reproduced—and has given me some details of his life, which will be read with interest in America, where though every Sunday school is familiar with the song, little is known about the singer.

NEARLY COST HIM LIFE.

He was 54 when he wrote it, and the occasion was a memorable one, for it nearly cost him his life. All day the words had been haunting him as he labored at his trade, that of a tinplate worker, but it was not until late, after the household had retired for the night, that he found time to write them down. He was not then in good health; his work had been particularly hard that day and physically he was completely exhausted when he set about his task. In his weakened state the nervous strain of composition taxed him severely, but the hymn had taken such a grip upon him that he felt he could not stop until he had hammered it out and given it permanent form on paper. As he finished the last words he collapsed utterly. He was found by his wife unconscious, his head resting on the feebly written page. Efforts to revive him proved futile for a time, and it was feared that he was beyond recall, but he rallied at length and gradually his strength was restored. He had no idea that the simple song which had been produced in such travail was a masterpiece of its kind. It was first published in a local Sunday school paper, "Good News for the Little Ones." There it attracted the attention of a London publisher, who obtained permission to include it in a collection of hymns he was issuing. It was set to music by Michel Watson, its popularity was instantaneous, and has played abiding.

CALLED TO REPEAT IT.

Long years afterwards, when Mr. Midlane was an old man, he came to attend a service at the City Temple, London, whose pulpit was filled by the late Rev. Dr. Parker, then considered the most eloquent preacher in the metropolis. A member of the choir sang as a solo, "There's a Friend for Little Children," with such touching effectiveness that she was twice entreated to repeat it. The large gathering was totally unaware that its author was present. After the close of the sermon Mr. Midlane scribbled a note which an attendant took to Dr. Parker, and a meeting between them followed. "I would rather be the author of that hymn," said the famous divine, "than be the preacher of the most eloquent sermon. My sermon would simply penetrate the hearts of a few, but your hymn goes all over the world."

HAS WRITTEN EIGHT HUNDRED.

It is only one of something like 800 he has written, many of which are still general favorites. Most of them are for the young. His personality reveals his success in writing them. At four score his heart is still that of a little child. No doubts have ever disturbed his faith. Modern scepticism and the higher criticism have never shaken his implicit belief in the simple creed of the Quaker. He is a placid, contented,



A TORRENT
OF HOT
WATER

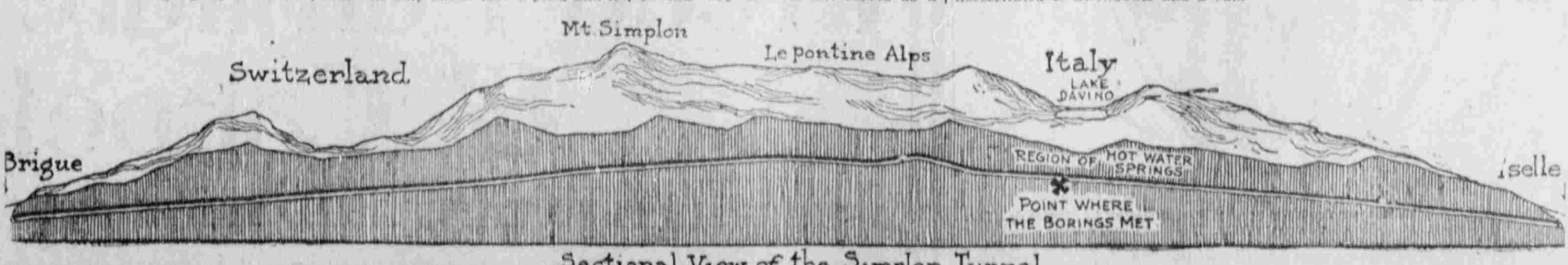
through a hydraulic main a pressure of 10 tons upon the cutting point of each drill. On the Italian side similar power is derived from the Diveria in much the same fashion.

Wonderful machines are these Brandt drills. They are the Meixen guns of subterranean borings. Like Maxim's, one of their advantages is extreme portability, for only four men are required to work and carry the drill. With three machines, which can all be fixed on one carriage, six holes can be drilled in the hardest rock in a little more than two hours. The compressed air drills used in the St. Gothard tunnel necessitated 16 attendants and a cum-

REALLY IS TWO TUNNELS.

The contract for the colossal work was undertaken by Messrs. Brandt, Braden & Co., of Hamburg, and their preparations were made with characteristic German foresight and thoroughness. To come with all the obstacles, so vastly greater than those encountered in any other subterranean railway, a form of construction was adopted differing from that of the three Alpine tunnels already built.

They are all double-track single tunnels. The Simplon consists of twin single track tunnels, 56 feet apart, and connected with one another by transverse galleries at intervals of 220 yards. In this way each tunnel serves as a



Sectional View of the Simplon Tunnel