

THE HARDEN HAND-GRENADE FIRE EXTINGUISHER.

Ever since P. T. Barnum, the renowned showman, brought to this country and attempted the general introduction of Philip's Fire Annihilator, about a quarter of a century ago, there have been a number of chemical fire extinguishers introduced, some of which have proved quite successful.

There has been recently introduced a very simple and inexpensive apparatus, called "The Harden Hand-Grenade Fire Extinguisher," and from the result of the numerous tests made before the public in this city, this would seem to fill a want not before obtained.

These little hand grenades extinguish fires on the same principle as the chemical fire engines, which are charged with carbonic acid gas, which by calculation possesses forty times the extinguishing effect upon fire that water has. These grenades extinguishers consist of a glass globe about four inches in diameter that resembles a small jug, and this contains the liquid which produces large volumes of fire extinguishing gas when brought in contact with flames.

The liquid it is said will stand a temperature of fifteen or twenty degrees below zero; thus all danger from its freezing and becoming useless when wanted is avoided.

A representative of the *Scientific American* was present at an exhibition trial of this extinguisher a few days ago, and witnessed the following experiments:

A fire was lighted at the side of a pine board fence, some 8 feet high by 15 long, the surface of which was coated with tar, and a kindling wood and paper placed against it, the whole having a gallon or so of benzine scattered over it. The blaze sprang up almost instantly, and in less than half a minute the flames shot up twenty or thirty feet. To put out this fire, which it took but a few seconds to accomplish, three of the grenades were flung with enough force to break them and scatter their contents over the fence in the midst of the blaze.

Another trial was also made, in which the grenades were hung against the fence and the fire kindled under them. This time the blaze did not reach the height it attained in the former trial, but the grenades burst by the heat when the temperature had reached about 180 Fah., and the fire was again quickly extinguished. A watchman making the rounds of a factory with one or two of these in his hands would find them vastly more serviceable than a pail of water or a small hose, were either of the latter always on hand, as they so seldom are; and the grenades can be successfully used in cases where it is difficult to exactly locate or get near to a fire. To hang them in places where there is liability to fire, so they will burst before a fire has gained much headway, is one of their obvious uses.

For summer houses and stables, where the materials of construction are usually of an inflammable character and water is seldom at hand, these grenades would prove highly valuable. At the brewery of J. C. G. Hupfel a few days ago a fire broke out which promised to be more or less serious, but it was quickly extinguished by using four of the grenades. *Scientific American*.

Tree Planting.

Lieutenant-Governor Dewdney in his speech at the opening of the North-West Council has the following paragraph:-

"I shall ask your attention during the session to the consideration of a measure for the encouragement of tree planting. Experiments already made have demonstrated the rapidity with which certain classes of trees will grow, and there is no reason why in a few years the aspect of the settled section of our rich treeless prairies might not be completely changed. A large portion of the states of Illinois and Iowa, some fifteen or twenty years ago were as bare of trees as any portion of these Territories and are now fairly well timbered."

Lumbering on the Ottawa.

OTTAWA July 17.—The quantity of lumber which passed through the Government works so far this year has been much smaller than for several seasons past, partly owing to low water, and partly owing to the large reduction of the cut last year.

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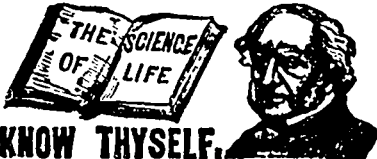
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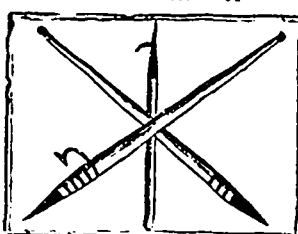
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