

has great natural resources upon which to base an important chemical industry, and its geographical position gives it an advantage in supplying certain markets of the Pacific Slope, so it is probable that a more important and interesting chemical industry will grow up there when the transportation problem is settled.' W.

UTILIZATION OF SOLAR HEAT FOR POWER.

Prof. L. G. Carpenter, Fort Collins, Col., presented at the late meeting of the American Association in Boston the results of some interesting observations, continued during ten years, of the amount of solar energy received on our Western plains.

These observations show an intensity of from 7 to 17 calories per square meter, from 8 A.M. on sunny days. This is equivalent to from $\frac{1}{2}$ to $1\frac{1}{4}$ horsepower per square yard. It appears also to be as reliable as the wind, which is exclusively used as a source of power for small plants. W.

NEW METHOD OF TESTING THE EFFICIENCY OF STEAM-PIPE COVERINGS.

A new method of testing the efficiency of coverings for steam pipes was described by Prof. Charles L. Morton before Section D of the American Association, which should be capable of yielding more accurate results than those in common use.

By this method a section of the steam pipe is heated electrically by means of a coil of wire in oil within the pipe. The amount of energy necessary to keep the pipe at a definite temperature is measured. Since the energy thus supplied is just sufficient to maintain a constant temperature, it must therefore equal the energy lost by the pipe. Hence, from the electrical energy supplied, the author is enabled to calculate the heat lost from the outside of the pipe.

As there is considerable discrepancy between the reported tests of the efficiency of a number of these materials in common use, the suggestion of this new method, which promises to yield more accurate results, is worth the attention of steam users. W.

THE SAND BLAST FOR CLEANING MASONRY.

The value of the sand blast for cleaning old and discolored masonry walls appears to be still open to question, but as all the facts bearing on the use of this mechanical agent for the purpose will be useful to the architect and builder, the latest reported example of the kind is herewith recorded on the authority of the *Iron Age*, viz.:

"The sand blast has been applied to the work of cleaning the stone walls of Pardee Hall, Lafayette College. The interior of the building was destroyed by fire some time ago, and after the standing walls had been pronounced safe for rebuilding, this method of removing the smoke-stains and crumbled surface was selected. The compressor was one of the Ingersoll-Sergeant direct-acting type, having a 10 x 10 inch steam cylinder and a 10 x 14 $\frac{1}{2}$ air cylinder.