

ment and reduction of ores are in operation; one of these also manufactures white lead in considerable quantities. A copper plant and smelters have just been completed at a cost of nearly \$2,750,000. Shipments of Utah products to outside markets have thus far consisted largely of ore, bullion, wool, mutton, cattle and some agricultural products, principally potatoes, and of these there will probably be a surplus for shipment this year of 500,000 bushels.

The principal cities in order respective to size are Salt Lake, Ogden, Provo, Logan and Park City. Salt Lake is the territorial capital and the principal city in commercial importance; it is the center of the manufacturing and smelting interests. Ogden is a growing city, with various manufacturing and jobbing interests, the center of a rich agricultural district, and the junction and terminus of a number of transcontinental and local railway lines. Provo and Logan obtain their support largely from the agricultural regions surrounding them, while Park City is a highly prosperous mining city, boasting of some of the largest and richest silver mines in the world. First among these is the Ontario, which has paid since 1877, 197 dividends, aggregating \$13,175,000.

Mining, agricultural and manufacturing interests are increasing steadily. The great depression in silver and lead has given an impetus to the production of gold and copper. Reservoir and canal companies are opening new lands and rapidly extending the agricultural area, while two Indian reservations—the Uintah and Uncompahgre—embracing a combined area of 6,207 square miles, or 3,972,480 acres, will soon be opened for settlement. The measure authorizing this has become a law. This region is rich in timber and mineral, and contains many hundred thousands of acres of well watered and fertile soil.

Several new lines of railroad are projected, some being extensions of those already in operation, while others are independent enterprises of companies already organized. To the thinker, consideration of the resources of the coming state of Utah suggest great possibilities. H. M. P.

#### EDUCATIONAL LECTURES IN WAYNE COUNTY.

GROVER, Wayne Co., Utah,  
November 1, 1894.

On Saturday and Sunday last, the 27th and 28th of October, a very interesting conference of the Mutual Improvement associations was held at Lee, Wayne county. Prof. Jos. B. Keeler and Sister Arata Young, of the B. Y. Academy, Provo, were present. The exercises were interesting and instructive and the reports of the various branches encouraging. A lecture upon physiology and one on stellar parallax were given by members of the association and some creditable songs and recitations were rendered.

There is an intense desire for knowledge and increased school facilities agitating the people here, and private classes are being organized for the study of music, science and kindred subjects. Prof. Keeler and Sister Young seemed to recognize this fact,

for the general tenor of their remarks was to foster and encourage the laudable work of self and mutual improvement. Prof. Keeler, by request, delivered a lecture on geology, from an astronomical standpoint, which was well attended. The inquiries and conversation which followed must have been very interesting to him, as it plainly demonstrated the awakening interest in scientific matters. It was a very pleasant and profitable time.

GROVER.

#### JAPANESE PAGODAS.

The absence of buildings of any size and antiquity in Japan is ascribed to the destruction of them by the frequent earthquakes which occur. The only structures which seem to be earthquake-proof are the pagodas, which are erected before the temples. There are many pagodas which are seven or eight hundred years old and as solid as when first built. There is a reason for this, and it lies in their construction. A pagoda is practically a framework of heavy timbers which start from a wide base, and is in itself a substantial structure, but it is rendered still more stable by a peculiar device. Inside the framework and suspended from the apex is a long, heavy balk of timber two feet thick or more. This hangs from one end, and to the other end are bolted, at each of the four sides, four more heavy timbers, and if the pagoda be very lofty still more timbers are added on to these. The whole forms an enormous pendulum which reaches to within six inches of the ground. When the shock of an earthquake rocks the pagoda the pendulum swings in unison and keeps the center of gravity always at the base of the framework. Consequently the equilibrium of the pagoda is never disturbed, and this is the explanation of the great age of many of them, when from their height one would suppose them to be peculiarly susceptible to the effect of an earthquake.

Hitherto the long sticks of timber in the center of the pagoda have been supposed to be for the purpose of supporting the framework. It was not until the recent earthquake brought them into prominence that their purpose became generally known among Europeans.—*Ex.*

#### HOW TO CHOOSE A SPONGE.

Although the difference between a good and a bad sponge is very marked, but few people seem able to appreciate it. The first requisite of a good sponge is that it should be dark in color. The beautiful yellow sponges commonly seen in druggists' windows are a delusion and a snare. The natural color is a light to medium brown, and the yellow sponges have been bleached by a vitriol bath, which destroys their elasticity and makes them wear out much sooner.

The feel of a sponge should be velvety, it should compress into a very small bulk by squeezing, and it must be of a uniform color. The best and most expensive are Levant sponges. They come from the eastern Mediterranean. The Dalmatian sponge is next in quality and price. There are

very many others, however, known to the trade as horse sponges, Zimocca sponges, yellow, velvet, sheep's-wool and glove sponges. The prettiest and at the same time the cheapest is the grass sponge, which is made up of myriads of small filaments and looks like a ball of yellow wool.

The majority of sponges used in this country come from Florida. Cuba also supplies a good many. The sponge, after being detached from the bottom, either by a dredge net or an instrument something like a sickle, which is made for the purpose, is allowed to lie in the sun until the flesh decomposes.

The sponges are then trodden under foot in running water until the flesh is all washed away, leaving the skeleton, which is the sponge as we know it. If the decomposition is allowed to go too far yellow spots will appear upon the sponge and damage it. They are then packed up and sent to the dealer, and, after a further washing, put on the market. The export trade in New York in sponges is very large and they are exported to every country in Europe.

#### THE TEASDEL ASSIGNMENT.

William F. Nealen has filed a suit against the firm of S. P. Teasdel & Son, together with Wells, Fargo & Co., Joseph Geoghegan and John E. Dooly in the Third district court. Plaintiff for himself and other creditors prays that all the undivided property and assets of Mr. Teasdel be ascertained and determined by a decree of the court before any distribution of the assets of either S. P. Teasdel or Teasdel & Son be made in order that the trust imposed upon Joseph Geoghegan and John E. Dooly be administered under the provision and control of the court. Also that the claim of the plaintiff in the sum of \$25,578.45, for which judgment has been entered, be adjudged to be a claim against S. P. Teasdel and not against the firm of Teasdel & Son, and that it be adjudged that a claim of Wells, Fargo & Co. in the sum of about \$20,000 be against the firm of Teasdel & Son.

Plaintiff further asks that the assignee be enjoined from distributing any funds now in their hands, and that a receiver be appointed to take charge of the property.

#### PARIS HAS A NEW METAL.

The low price of silver in Paris has stimulated the inventive genius of a manufacturer, who has consequently made a new metal by means of an alloy of copper and silver, using the successful proportions of the two. He has obtained in the new metal a most extraordinary degree of strength, and most valuable for resisting sudden or long-sustained strains. There seems little doubt that the cost of production will not be so great as to prevent its large use in the future, even should silver greatly increase in value. To the low price of silver will be credited the idea of using it as an amalgam for a specially high-class metal.—*Exchange.*

BERLIN, Nov. 8.—Emperor William, replying to President Dole's official notification, has acknowledged the republic of Hawaii.