

them into realization. You will not allow the faith you profess to be made a mock of impious hands to be placed on the temple of the true God, the images you adore to be thrown down by unbelief. The aggressors shall not profane the tombs of your fathers, they shall not gratify their passions at the cost of your wives' and daughters' honor, or appropriate the property that your industry has accumulated as a provision for your old age. No, they shall not perpetrate any of the crimes inspired by their wickedness and covetousness, because your valor and patriotism will suffice to punish and abase the people that, claiming to be civilized and cultivated, have exterminated the natives of North America instead of bringing to them the life of civilization and of progress.

"Philippines, prepare for the struggle and, united under the glorious Spanish flag, let us fight with conviction that victory will crown our efforts, and to the calls of our enemies let us oppose with the decision of the Christian and the patriot the cry of 'Viva Espana.'"

"Your General,
"BASILIO AUGUSTIN DAVILA.
"Manila, 23rd April, '98."

UTAH ORE SAMPLES.

That John H. Wootton has met with gratifying encouragement in collecting ores for a mineral exhibit during the session of the International Mining congress, is very apparent from the gentleman's report just made. Thus far, Mercur and Tintic are the only fields covered, but they in themselves form a very interesting collection and will demonstrate to the visitor what the mines of these districts have to offer.

In his report Mr. Wootton begins with the Mercur mine at Mercur, from which he is assured by the management that the display for the congress is the finest ever taken from the property. It includes the cinnamon ore, an ore designated by the management as an oxidized lime, and the peculiar ore known as stibnite—the sulphide of antimony.

The Golden Gate and Geyser-Marion furnished very interesting samples of their ores, including the arsenical and oxidized varieties, some specimens of the regular. The only silver ore from the Mercur district comes from the Hercules, running about 200 ounces silver to the ton. The Northern Light ore is yet to be secured.

The contribution from La Cigale is their regular milling ore, showing the average values of the district, as do the samples from all of the mines. The highest values from the district are in the Mercur mine samples, some of which run \$30 gold. Both the Overland and Galena people will send samples in time for exhibition.

All of the Tintic contributions are splendid samples of the output of the district, showing very clearly the character of the ore deposits. Some of them carry very high values, and all are interesting to the student of mining operations.

About 1,200 pounds of ore was given by the Centennial-Eureka. A small sack of carbonate from the mine will run 45 per cent lead, 1,000 ounces silver and \$10 gold. The galena sample will run 150 ounces silver, 50 per cent lead and \$5 gold. Their copper ore is 60-ounce silver, 25 per cent copper and \$5 gold. One very large piece of ore carries 1,700 ounces silver to the ton.

The Humbug contributes some very high grade samples of crystallized lead, running 60 per cent; some galena ore and some horn silver carrying 3,000 ounces silver. The Uncle Sam lead ore goes up to about 70 per cent lead, and

it also gives some very fine carbonate samples.

About 1,200 pounds of samples come from the Eureka Hill. It is practically all from their milling ore. One piece weighing about 500 pounds carries 35 ounces silver and 20 per cent lead. Then there is a silver copper ore running 500 ounces silver, \$40 gold and 5 per cent copper.

About 2,000 pounds comes from the Bullion-Beck. The galena ore is 40 per cent lead, \$45 silver and about \$2 gold. The copper-lead-silver ore is very showy, making beautiful specimens with the malachite and azurite stains of green and blue. This is 7 per cent copper, 10 per cent lead, 155 ounces silver and \$2 gold. The carbonate from the Beck runs 15 per cent lead, 60 ounces silver, about \$1 gold. Another sample of the copper ore runs 10 per cent copper, 50 ounces silver, \$25 gold. The best copper ore goes about 30 per cent copper, 15 ounces silver and \$1 gold.

Galena samples from the Uncle Sam carry 75 per cent lead and 45 ounces silver; the carbonate runs 70 per cent lead and 40 ounces silver.

In the Humbug, interesting samples were given of the yellow carbonate that run \$50 gold and 150 ounces silver. Then they have the red carbonate that carries 500 ounces silver and \$20 gold. The Humbug galena carries 75 per cent lead and 400 ounces silver. The mine also contributed a sample of horn silver that runs 1,500 ounces to the ton.

In the Gemini samples is a malachite—azurite ore—a lead carbonate running 95 ounces silver and 25 per cent lead. The galena from this mine is 50 per cent lead and 45 ounces silver. Another very fine sample from the mine carries 15,000 ounces of silver in horn silver ore. It is a quartz or literally held together by streaks of silver, some of them as thick as a silver dollar.

From the Mammoth there are samples as follows: Galena, 45 per cent lead, 40 ounces silver, \$2 gold; copper—azurite—15 per cent copper; 12 ounces silver, \$5 gold. The Mammoth's gold-silver ore is a needle spar carrying \$100 gold, ten ounces silver. Their iron quartz carries \$85 gold and 16 ounces silver. The samples of their milling ore carry ten ounces silver, \$12 gold; copper sulphate samples are 50 per cent copper, with five ounces silver.

Silver City's Dragon Iron mine contributed some magnificent samples of iron ore running on an average 65 per cent iron.

In the Four Aces, Mr. Wootton reports a discovery of interest to the management of the property. While he was selecting samples of ore for display he discovered one sample with wire silver in it—a thing unknown in the property before. Their galena samples carry 55 per cent lead and 25 ounces silver.

South Swansea sends some very nice samples of galena ore: 65 per cent lead and 125 ounces silver; carbonate ores, 60 per cent lead and 150 ounces silver. The South Swansea samples are much of the same character—galena, 170 ounces silver, 65 per cent lead; carbonates carrying 30 per cent lead and 200 ounces silver. Another interesting sample from the South Swansea shows their iron pyrites, of which they have a large body, carrying 25 ounces silver.

Samples from the Ajax are extremely valuable as showing the varying characteristics of the district. One is an iron carbonate carrying 30 per cent lead and 200 ounces silver; another is an azurite-malachite copper carrying 15 ounces silver and 15 per cent copper; a third is a copper sulphide, with 50 per cent copper, four ounces silver and \$2 gold. One of the finest specimens in the whole collection came from the Ajax, and is a sample of ruby copper,

almost native copper, 65 per cent strong.

After enumerating these samples, Mr. Wootton's report explains that the other properties of the Tintic and Mercur districts, without exception, intend to be represented in the display, although various causes have prevented them from getting in with the first shipments. The underground workings in the Picnic and Martha Washington were both inaccessible to Mr. Wootton because the new hoists were being installed, but good samples are promised from both mines. The Grand Central was also unable to put out its samples, but will send them in ample time for the congress. Altogether, the collection promises to be the most notable ever gathered in the state as a purely commercial display, without any of the sky-rocket attributes of the collections that are usually got together for show purposes only.

UTAH FRUIT AT OMAHA.

The exposition now being held at Omaha is international in scope, yet primarily intended to mirror the vast region west of the Mississippi river. It presents an opportunity unprecedented and not soon to be repeated for the inhabitants of the great West to show the diversity and excellence of the products of field and mine. Utah is, by reason of geographical location and climatic conditions, able to produce greater diversity of agricultural and horticultural products than any other state in the "New West," save alone California. In the wide range of useful metals no state equals Utah, as evinced by the display already in place at Omaha under the direction of Mr. Don Maguire. Hon. W. L. Shurtliff says that thus far the Utah mineral display is absolutely without a near rival, considering the great diversity and complete classification of metals and useful stones.

What is true of the mining exhibit may be made to apply to the agricultural and horticultural display if the farmers of Utah will but grasp the opportunities now presented. The fame of Utah fruits has gone abroad, and only last week the chief of the horticultural department of the exposition remarked to Judge Shurtliff that he expected a grand display of fruit from Utah. It is plain that the eyes of the world will be upon us, and the effort should be commensurate with the importance of the event.

As to the possibilities in a horticultural sense, there is no question but that Utah can produce the best of each class of fruit that is grown in this latitude. It only remains for the Utah farmer to do his best and the verdict will be secured. However, by the phrase, "do his best," is not meant simply the best of an ordinary crop grown under ordinary conditions. At the Exposition our fruits will come into competition with the productions of the various fruits products of the West, comprising the greatest fruit belt in the known world. Moreover, in some localities that will compete are the most advanced and progressive horticulturists of America. Thus the Utah fruits will be compared with the finest productions of highly favored sections where science and skill supplement natural conditions. It therefore behooves all who wish to uphold the reputation of Utah fruit and to add new glory to the name, to do everything necessary to produce the best possible in every class for the horticultural display at Omaha.

There is urgent demand for extraordinary effort in this matter. The various points to receive especial attention are, thinning of the fruit, careful spraying, thorough cultivation, rational irrigation, care in picking, grading and packing. Ordinary