

to have had four wheels derived from spindle-whorls, and to first transported effigies of the goddess of fertility.

The diving-cabin, or "submarine traveler," of M. Piatti del Pozzo, which has been used in the Seine and is believed to be suitable for deep sea exploration, is ten feet in diameter and weighs ten tons. It is moved by three screws and a helm worked by electricity. The cabin, which is entered through a man-hole, is claimed to have an air-supply sufficient for 48 hours for four persons, is lighted by electricity, and is provided with levers or hand-spikes for working the shovels, picks, groppling irons, etc., on the outside of the machine. Conical tubes provided with lenses give views of the ground and exterior objects in all directions. Communication with land or a boat can be kept up through a telephone, and even if the cable supporting the apparatus should break, it is only necessary to touch a lever to cause two tanks containing ballast to overturn, when the globe will at once rise to the top of the water.

If the results claimed by Kozlovski, a Russian physician, are confirmed, the electric arc light has an astonishing effect in rheumatism and neuralgia. The patient sits about five feet from the powerful light, the rays of which are screened by cardboard from all parts of the body except the affected region. In three months 38 patients were treated, and recovery was reported in 8 cases of sciatica, in 2 cases out of 4 of neuritis, in 14 cases out of 18 of chronic rheumatism, and in 3 cases of lumbago. The exposures last from three-fourths of a minute to two minutes, not more than a dozen applications—at intervals of three or four days—being necessary in any case.

The process of crystallization is being studied by Professor Von Schroen, who has taken 2,800 photographs to show the transfer of organic into inorganic matter. It seems that this fact led to a recent sensational and incorrect report that crystals had been found to be organic substances.

Petroleum ether has proved to be adapted for low temperature thermometers, as it is still in a semi-liquid condition and capable of further contraction at the temperature of the liquefaction of air—310° below zero Fahr.

IDAHO JULY REPORT.

Idaho section, climate and crop service, weather bureau, monthly report for July, 1897, D. P. McCallum, section director, Idaho Falls, Idaho.

The month opened with cloudy and cool weather prevailing generally, frequent showers occurred, being unusually heavy in the northern section, but in other parts of the state consisting principally of light local showers resulting from widely scattered thunderstorms. The latter part of the month was very dry with an abundance of sunshine and high winds which were detrimental to unirrigated crops, though in the northern section and in parts of the west no special damage resulted. Light frosts occurred in several localities late in the month but no serious injury to crops was reported.

Grain advanced rapidly and by the end of the month harvest was on in parts of the northern and western sections; in general it may be stated that the crop is good in the northern section, fair in the western and variable in the eastern. Owing to long continued drought early in the season late sown wheat is almost a failure in many places. Potatoes and garden truck in season are generally in satisfactory condition. The first crop of alfalfa was cut and well secured early in the month, and by the end of the period second crop was in promising condition.

The mean temperature for the State was 64.0 degrees, 7.0 degrees cooler than July of last year. The highest monthly mean temperature was 71.5 degree at Payette, and the lowest 49.8 at Lake; the highest temperature reaches during the month was 108 degrees at Minidoka on the 25th, and the lowest 27 degrees at Lake, Martin and Swan Valley, the first named on the 17th and the latter on the 19th, making an absolute range of 81 degrees for the month. The greatest local monthly range of temperature was at Minidoka, 78 degrees, and the least at St. Maries, 54 degrees.

The average precipitation was 0.75 inch, an excess of .02 inch over July, 1896. The greatest amount was at Murray, 2.43 inches, and the least at Burnside and Martin, a trace; the greatest amount in any 24 hour period was 1.84 inches at Blackfoot on the 30th. The average number of days with .01 inch or more of precipitation was 4.

Average number of clear days 18; partly cloudy 8, and cloudy 5.

Prevailing wind direction southwest; average hourly velocity (from record at Idaho Falls), 12.0 miles; maximum velocity, at Idaho Falls) 50 miles per hour from the southwest, on the 17th.

WEEKLY CROP BULLETIN.

SALT LAKE CITY, Utah,
Aug. 10, 1897.

The copious showers during the past week which were fairly well distributed over the State did much to improve the condition of the growing and maturing crops. Corn, potatoes and late grain were greatly benefited by the much needed moisture which came just in time to save some of these crops from proving a total failure. High winds during the middle of the week did considerable damage to orchards by blowing the fruit from the trees. Harvesting grain and hay continues with varying results. In some sections the yield is reported fairly good, while in others much less than the usual average is expected. Potatoes and corn are reported in a satisfactory condition, and in some sections promise a better yield than last year. Threshing has commenced and the cutting of the second crop of lucern is now in progress. There is a general complaint of the scarcity of water in nearly all districts.

Beaver—Warm with nice showers which were good for all kind of crops; harvest in progress; corn doing well.

Boxelder—Grain harvest about finished and threshing commenced, yield light; some lucern seed is being harvested; crops light.

Coebe—Haying nearly done; second crop of lucern being cut; raspberries nearly gone; early apples ripe; potatoes looking nice; corn doing well; grain harvest in progress.

Emery—Weather during week very favorable to crops; the rains were most opportune and came just in time to save most of the crops which were suffering from the drought.

Davis—Past week favorable for growth of crops and harvesting operations; wheat about all cut, crop light; second cutting of lucern about completed; corn look well; early fruit about gone; late fruit promising.

Grand—Several showers during past week which were much needed by vegetation. Potatoes promise a better crop than last year.

Garfield—Weather of past week warm with copious showers. Crops growing nicely; grain just beginning to turn; potato crop not very promising.

Iron—The week has been favorable to some of the growing crops. The heavy wheat is lodged and may be damaged by rust; the second crop of lucern is ready to cut and is a better crop than usual. Potatoes recovering from July frost and may make a crop yet; fruit doing nicely.

Juab—Wheat harvest most over. Second crop of lucern ready to cut; not a very heavy crop. It is to all appearances a potato year, and if water holds out, will be a good crop both in quantity and quality. Early apples and apricots ripe.

Millard—Second crop of lucern being cut; grain about all cut; yield not up to the average; fruit ripening too fast on account of drought and extreme heat; water very scarce and insufficient to mature some of the grain; corn and potatoes good.

Morgan—Wild hay about all harvested in good condition; second crop of lucern about ready to cut; oats and wheat beginning to ripen; potatoes very promising crop—crops generally pretty fair—squirrels doing considerable damage to grain and potatoes; water holding out good; ranges getting dry.

Plute—The warm showery weather of past week has been good for growing crops; second crop of lucern commencing to bloom; grain showing up a good average; wild hay soon ready to cut.

Rich—Strong winds have characterized the weather during the past week; heavy showers fell on the 4th and 5th; haying is well advanced and fall wheat is beginning to ripen.

Saupele—Weather hot with occasional showers; fall wheat being cut, spring wheat ripening fast; crops about average in some sections and below average in others owing to drought and scarcity of water.

San Juan—Ground very dry and crops are suffering for water; unless rain comes soon crops will be poor this season; range getting very dry, but grass good yet.

Salt Lake—Past week warm and sultry with a heavy rain on the 6th which damaged a vast amount of lucern; harvesting almost over and threshing begun; irrigated grain crops good; dry farm grain a partial failure.

Summit—Heavy hail and rainstorm on 2nd which beat down the grain; streams were swollen over their banks