

The Mineral Argus.

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Mineral Argus.
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L. L. & VROOMAN.
 at Maiden P. O. as Second Class matter.

Professional Cards.

M. TRUDELL,
Attorney at Law,
 opposite Mineral Argus Office.

Blanks and Conveyances attended to on Short Notice.

C. DWINELLE,
Notary Public,
 OFFICE AT RUSTLE, M. T.
 Blanks and Conveyances filled and attended to in Short Notice.

G. HATCH,
Attorney-at-Law
 WHITE SULPHUR SPRINGS, M. T.
JAMES A. SMITH,
Attorney at Law,
 MAIDEN, M. T.
 Offices in all Courts of the Territory.
 Mining Law a Speciality.

M. ESLER,
Notary Public.
 Conveyancing. Legal blanks of all kinds filled out and acknowledged.
 OFFICE AT MONTANA MINE, MAIDEN, M. T.

L. WATERMAN, H. G. MCINTIRE,
WATERMAN & MCINTIRE,
ATTORNEYS AT LAW
 FT. BENTON, M. T.
 Attend to all business entrusted to their care from Maiden and vicinity.

Hamilton & Witherall,
 DEALERS IN
 Wines, Liquors & Cigars,
 HEAD OF MAIN STREET,
 Maiden, Montana.

City Bakery.
 VINCENT GIES, Prop'r.
 Fresh Bread, Pies, &c.
 EVERY DAY.
 Next Door west of Argus Office,
 MAIDEN, M. T.

Billy Jenkins,
BARBER!
 HAIR CUTTING,
 SHAMPOOING,
 HAIR DYEING,
 In the Best Manner.
 Give him a call.
 BATH ROOMS IN CONNECTION.

A. R. BARROWS,
 PROPRIETOR OF
Obet Hotel.
 FIRST-CLASS TABLE, ROOMS AND BEDS.
 FINE GENERAL STORE IN CONNECTION.

Maiden Drug Store.
 DR. J. M. RAWN, - PROPRIETOR.
 DEALER IN
DRUGS, CHEMICALS,
 PATENT MEDICINES OF ALL KINDS.
 Fine Toilet Soaps, Fancy Hair and
 Tooth Brushes Perfumery, &c. &c.
 FINE LINE OF STATIONERY.
 Pure Brandy, Wines and Liquors, for Medicinal
 Purposes.
 CIGARS AND FINE GRADES OF TOBACCO
 A SPECIALTY.

John J. Campbell,
 Dealer in
WINES,
LIQUORS
AND CIGARS.
 Andersonville, - Montana.

Day's House,
 ON BIG SPRINGS CREEK.
 REEDSFORT, MEAGHER CO., M. T.
 Has recently been fitted up in the very best of style
 for the accommodation of the traveling public.
GOOD STABLING FOR HORSES
 In connection with this house.
FRANK DAY, Proprietor.

BIG CASINO MILL,
 Near Reedsfort, M. T.
LUMBER
 OF ALL KINDS.
 DRESSED FLOORING AND SIDING,
SHINGLES,
 Constantly on Hand at Fair Prices.
W. H. Watson.

National Exchange,
 JOSEPH W. HAMILTON, Prop'r.
 First-Class Bar and First-Class Goods of Every
 Variety.
 Fine Music, Vocal and Instrumental,
 Every Evening.
 FOOT OF MAIN ST., MAIDEN.

Canon Saloon.
 POTT & HAYDEN, Props.
 Maiden Gulch, one and one-half miles
 from Town.
 Fine line of Wines, Liquors and Cigars
 Constantly on Hand.

MAIDEN
Meat Market.
 BARNEY TRAINOR, PROPRIETOR.
 All kinds of Fresh Beef, Pork, Mutton,
 Sausage, &c., &c.
 MARKET AT FOOT OF MAIN ST.
 Fresh Vegetables Cheese, and But-
 ter Always on Hand.

COLLAR MILL
IN FULL OPERATION
AND REDUCING SIXTY
TONS OF ORE DAILY.
 The Gulch in Which it is Lo-
 cated Resounds with the
 Clatter of the Vast
 Machinery.
Twenty Mammoth Stamps
Crushing to Pulp 120,000
Pounds of Ore Daily.
 The Effect on Maiden—Now
 Among the Leading Camps
 of America.

Thousands of Tons of Ore on
 the Dump and Untold Mill-
 ions in the Mine.

In February, 1883, the present Col-
 lar Company began shipping machinery
 for the prospective 20-stamp mill, to
 be erected in Ford's gulch, at the foot
 of Crystal mountain, and ever since
 mechanics have been busily employed
 erecting buildings and building stone
 foundations for the ponderous rock
 crushing machinery that is now reduc-
 ing the ore wrested from the heart of
 Crystal mountain, and now famous
 throughout the country as the "Collar
 Mine."

This mine was discovered in in Au-
 gust, 1880, and located in September
 of the same year, by C. C. Snow,
 E. A. Erwin, Chas. Bessey, C. Young,
 J. R. Kemper and F. T. McPartin.
 These parties, all old miners, and the
 first prospectors in this district, devel-
 oped this property, exposing a good
 body of paying ore, and in July, '82,
 C. C. Snow, representing the then
 owners, went east to secure the assist-
 ance of capitalists so as to continue
 development and procure the necessary
 machinery for reducing the ore.

Through his solicitation, General
 Meade, of Omaha, largely interested
 in the smelting works of that city, and
 S. S. Eaton, of St. Paul, invested in the
 enterprise, and from that moment in-
 terest in the Collar Mine, and the
 Warm Springs Mining District, was
 general, and confidence in the richness
 and future of the district was freely
 expressed by those who had seen the
 country and studied its geological for-
 mation.

Monday, November 10th, after nine
 months of continuous labor, employ-
 ing constantly nearly 100 men, the
 mill, having reached that stage of com-
 pletion that would warrant, was set in
 motion, in the presence of most of the
 officers of the company and construct-
 ing engineer Mackay, as well as the
 patentee of the adopted process, Mr.
 N. P. Boss, and low grade ore run to
 fill seams in machinery. Every part of
 the vast machinery worked to perfec-
 tion, showing the care and skill that
 had been taken in its construction.

The total cost of the mill, including
 buildings and machinery is, as near as
 can be estimated at present, \$116,000.

At the last meeting of the stock-
 holders the following officers were
 elected: President, Gen. C. W. Meade,
 Omaha; Sec. and Treas., S. S. Eaton,
 St. Paul; Trustees, C. W. Meade,
 S. S. Eaton, J. N. Sanders, Isaac Staples
 and A. DeGraff. These men have
 taken the deepest interest in the pro-
 secution and completion of this work,
 expended a large sum of money, but

notwithstanding the great disadvan-
 tages and inconveniences under which
 they were compelled to labor, have
 finished the task, and will soon be
 gladdened with silver bars that will
 return capital invested and a fortune to
 all the owners.

The effect of the showing of the
 results of this mill will be a great factor
 in the future of this district, and its
 camp—Maiden—and, although we can
 give no statement as to the value of
 the weekly clean-up, we feel safe in
 ascertaining that it will astonish the most
 sanguine.

We give a full description of the
 construction and construction of the mill,
 taken from one of our first issues, giv-
 ing a complete description of all the
 machinery in use, and the manner of
 handling the ore as extracted from the
 mine, until its rich contents is run into
 silver bars.

SITUATION AND DESCRIPTION.
 The mill is finely situated on the east
 slope of Crystal Mountain, just above
 Ford's creek, from which stream the
 water supply is obtained through a
 flume 200 feet long.

The building consists of a battery
 room 34x40; crushing and sampling
 room 32x36; boiler and engine room
 32x36; pan and settler room 32x32, and
 retort and bullion furnace room 24x32.
 The frames are of extra heavy timber,
 framed and bolted together until one
 would think nothing short of an earth-
 quake would move it. A truss roof
 with corrugated iron, covers the whole
 and completes the fine appearance of
 the structure.

We will now proceed to give the
 reader a description of the inner works,
 commencing with the boiler and engine
 room, where will be found the two
 boilers which furnish the motive power,
 each 54 inches in diameter and 16 feet
 long; these are fed by a No. 4 Knowles
 steam pump. Also located in this room
 is a No. 6 Knowles steam pump and
 hose for use in case of fire.

Passing from the boiler room into the
 engine room we find, as the centre of
 attraction, a magnificent Frase & Chal-
 mer's Improved Corless engine of 150
 horse power, which is intended to drive
 all the mill machinery and is certainly
 capable of doing it.

From the engine room we pass to the
 crushing and sampling room where
 smelting ore is sampled and bought.
 Here will be found a 4x10 Blake Crusher
 from which the ore, after being crushed,
 falls to a set of 10x20 Cornish rolls,
 where it is crushed still finer. Passing
 from the rolls it is discharged into a
 revolving screen and the particles too
 coarse to pass through this screen are
 taken back to the rolls again by an ele-
 vator and again crushed. After leaving
 the screen it is fed into a Collom auto-
 matic sampler, which takes an average
 sample of the whole lot being run
 through. From here the sample is
 taken to a Collom patent ore grinder
 where it is ground fine enough for
 assaying. It is then assayed and set-
 tlement is made upon the basis of
 what the sample contains.

To the right of the crushing and
 sampling room is the battery room,
 where the ore-milling is first re-
 ceived. At a height of 36 feet above
 the floor of this room the tramway
 cars dump their loads upon a screen, or
 as it is called a "grisley." Through this
 screen the fine ore falls to the ore bins
 below and the coarse lumps run down
 to a 9x15 Blake crusher, where they are
 crushed and fall to the same place.
 From the ore bins 4 Tullock automatic
 ore feeders takes the ore and allows a
 regular amount of it to run to the bat-
 teries, which consist of four cast iron
 double discharge mortars, each weigh-
 ing four and one-half ton. Dropping
 in each of these mortars are five stamps
 each weighing 850 lbs. and falling at
 the rate of 90 drops per minute. A steady
 stream of water is fed into the mortars
 and the ore or "pulp" as it is then
 called, when crushed by the stamps
 sufficiently fine to pass through a 40
 mesh screen, is discharged direct to the
 pans. This method of discharging
 direct to the pans is known as the Boss
 process, and saves the labor and expense
 of six men in a mill of this size.

Passing from the batteries to the pan
 room the pulp is received in twelve
 pans, each five feet in diameter. At
 this point the salt used in amalgamat-
 ing is introduced—the quantity varying
 according to the nature of the ore. The
 pulp in the pans is kept in constant
 motion by machinery until the salt and
 chemicals have had ample time to work
 and allow the quicksilver to pick up all
 the small particles of silver contained
 in the ore. The pulp is then discharged
 into six settlers, each nine feet in di-
 ameter. The pulp in the settlers is given a
 slow motion, just sufficient to keep the
 lighter mass in suspension and allow
 the quicksilver and amalgam to sink to
 the bottom and discharge itself into
 three strainers or amalgam safes; here
 it is strained and as much as possible
 of the quicksilver is removed in this way.
 The quick is then pumped by a No. 6

Knowles pump to the east iron quick-
 silver tank, and from there is again
 distributed among the pans to repeat
 the operation. The amalgam is taken
 from the safes to the clean-up pans,
 forty-eight inches in diameter, where a
 stream of water is turned on it and the
 mass is thoroughly washed of all refuse
 matter left in it. It is then taken to the
 retort room where it is placed in two
 fourteen inch retorts, and sufficient heat
 introduced to vaporize the remaining
 quicksilver, which, in the form of vapor,
 passes from the retorts through iron
 pipes to a water tank where it is con-
 densed and removed to the quicksilver
 tanks. From the retort the bullion is
 taken to the bullion furnace where it is
 melted down and run into the silver
 bricks that so gladden the hearts of the
 fortunate owners.

All the machinery for this mill was
 built by Fraser & Chalmers, of Chicago,
 and is absolutely perfect. Everything
 ordered of them by the Collar Co. was
 to be first-class, and from the evidence
 here shown the conclusion is reached
 that they filled the bill. The Collar
 mill will remain a standing advertise-
 ment for this firm.

Mr. Angus Mackay, of Denver, Col-
 orado, Fraser & Chalmers's constructing
 engineer, had immediate charge of the
 work, and the Collar mill is another
 proof of the truthfulness of his reputa-
 tion as one of the best and most suc-
 cessful mechanical engineers in the west.

LOCAL NEWS.

Maiden is soon to have an exclusive
 clothing store.

Wm. Kemp has bought Dan Crowley's
 interest in the saloon at Lewiston.

One would think this was the bark-er-
 district from the number of dogs seen
 on the streets.

A petition is being circulated in Lew-
 iston and vicinity for the establishment
 of a postoffice in that thriving town.

Johnny Davis and wife arrived in
 town last Sunday from Junction City,
 after an absence of two months. They
 have returned to stay. We welcome them
 home.

Gene Erwin made a trip to Grap
 Range last week to look after merchan-
 dise that is daily arriving for Erwin
 Bro's new store, at that point. He
 reports a pleasant trip.

J. Arnold, the popular freighter, of
 Lewiston, left last week for Junction
 City for a complete saw mill outfit,
 shipped from Chicago, to be erected on
 the North Meccasin. The property of
 that enterprising mill man, W. H.
 Watson.

L. Roberts, the Reedsfort blacksmith,
 en route to Illinois, dropped in at our
 office last Sunday. Mr. Roberts goes
 east after a good assortment of tools, as
 he intends to have the finest shop in
 eastern Montana. He reports everything
 prosperous in the basin, and a bright
 future for both Lewiston and Reedsfort.

W. S. Wetzel, one of Benton's whole-
 sale and retail merchants, tarried a
 few days in Maiden last week. Scott
 sees a marked improvement in our
 town since his last visit. He is going
 to keep a watchful eye on Maiden, and
 we would not be surprised to see him
 adopt her as his "best girl" eventually.

W. T. McFarland is Maiden's guest
 this week. Mc. was one of the road
 viewers to lay out the county road from
 Maginnis to the Musselshell, last month,
 and afterwards run with the sheep
 until he is now wooly and hard to
 curry. He will, after a visit to
 White Sulphur Springs, and Helena,
 return here about Dec. 5th, and prob-
 ably open an office and be one of us.

We do not wish to be understood as
 crying for milk, yet there is no reason
 why there should not be a good dairy
 in this vicinity. The idea of the citi-
 zens of Maiden being compelled to rely
 on condensed milk is disgusting and
 ridiculous when we take into considera-
 tion that this is one of the greatest
 cattle countries in the world, and this
 section of Montana so well adapted to
 the dairy business. A good dairy at
 the present time is better than a gold
 mine, and we hope some one will take
 hold of the business at once. Delays
 are dangerous.

List of Advertised Letters.
 List of Advertised Letters remaining in the Post
 Office at Maiden, Meagher Co., Montana, for the
 month ending Oct. 31st, 1883.

Adams, C. H.	Henderson, J. E.
Alexander, E. W.	Irvine, McCray
Barnes, S. W.	Johnson George
Conklin, George	Lightbody, Thos.
Daly, Edward	Mills, Fred
Groves, Carrie P. Mrs.	Paul, A. P.
Hopner Barnett	Smith, W. S.
	When called for please say advertised.

J. W. HENRY, P. M.