MINING AT ANGELS.

Magnitude and Characteristics of the Utica Ledge.

RIVALS THE COMSTOCK.

Stopes a Hundred Feet Wide and Ore at All Levels.

THE DEEPEST ORE THE BEST.

The Other Mines on the Ledge Are in Almost Virgin Ground.

[Special Correspondence of THE CALL.]

ANGELS CAMP, CAL., July 30.—The Utica mine disaster has not been wholly a loss to Angels. It has served to show the people how largely dependent they are on this rich company for their prosperity, for one thing. There had grown up here quite a feeling of jealousy against the "monopoly," as it was sometimes termed, seemingly without just cause, as the company, by its enterprise and lavish expenditures, has made the town, and seems to deal fairly and liberally with its employes and all with whom it does business.

I have heard it said here that there is just as good ground lying idle as the Utica company is working. All it needs is capital for its development. It needs something more; it needs men of courage, brains and experience to use the capital. Capital has left mining wrecks all over California. Practical men are to-day making fortunes out of the salvage from these wrecks.

The Utica company is reaching out with long arms and grasping with strong hands immense possibilities. Under its control most of these possibilities will become certainties. What would California become with a hundred such "monopolies" at work developing its mining resources alone?

It is an advantage to Angels to have the truth brought home as only a shut-down could bring it. Another advantage, and a great one, is the interest awakened regarding the camp and the information disseminated through the agency of the fire. The magnitude and future possibilities of this great gold-belt are appreciated by but few right here at home, and are not dreamed of by the world at large. How few, even among mining men, know that the Utica vein is a veritable Comstock, with stopes 100 feet wide and pay-ore from wall to wall? And the vein is hardly prospected. It was gouged out on the surface in early days for a distance of 4000 feet, but the deepest level to-day is 1000 feet in the Utica, and two-thirds of the lode is virgin ground, so far as deep working is concerned.

The vein is a great fissure ranging from 20 to 100 feet wide, in a country-rock locally called slate and green stone, but which is mostly a hard diabase. The ore occurs in chutes of varying lengths, from 50 to 800 feet. It is in the form of bunches, veins and stringers of quartz, and often large masses of auriferous talcase schists. The ore is practically free milling, there being but about 1 per cent of sulphurets, which assay from from $60 to $80 per ton. The ore varies in richness in the different chutes, and that being mined from the lowest levels of the Utica is the richest. It is said to average between $8 and $12 throughout, and as the company can work $2 50 ore at a profit, the size of this bonanza can be appreciated. Their resources of ore on the upper levels would keep their mills busy for years, and they have a winze sunk nearly 200 feet below the 1000 level in rich ore.

But the company is not confining itself to ground of known richness. They have bonded the claim adjoining them on the south and named it the "Last Chance" and are sinking on it the finest three-compartment shaft on the lode. They are sinking on the vein and prospecting by drifting, and will go down 1500 feet if necessary to prove the vein. On parallel veins and in outlying districts the company have also bought and bonded a large number of claims and their future operations in this county alone promises to be stupendous.

It is the general supposition even here that the Utica Company owns nearly everything on the lode at Angels. Such is far from being the case. By reference to the accompanying sketch map it will be seen that between Angels Creek and the northern extremity of the Fritz mine, which is the last mine on the lode proper at the north end of town, the Utica Company only owns 1300 feet, or considerably less than one-third of the ground. The deepest shaft on any of the other claims (650 feet) is on the Angels mine, which is nearly as large as the consolidated claims of the Utica. There is no work being done on any of these northern mines except on the Fritz, where J. G. Maltman is sinking and drifting under a lease. The lowest workings on this mine are only sixty feet, and in the crosscut being run from the prospect shaft the vein matter is ninety feet wide and prospects well.

It is a mystery to miners and capitalists alike who visit Angels why this stretch of practically virgin ground, on the same lode and joining the Utica, should never have been developed. Imagine 3000 feet of ground adjoining the Con. Virginia or any of the other bonanzas of the Comstock, with hardly a pick stuck into it for fifteen or twenty years! Yet here, on a vein which almost rivals the Comstock in magnitude, which paid on the surface from one end to the other, with the evidence of uniform increase of richness in depth afforded by the Utica, nothing has been done but "waiting for capital"! There are evidences of awakening in Angels. The town needs an explosion!

I cannot find or hear of any map of this mining district, or even of the Utica lode. From information furnished by Mr. Lane, superintendent of the Utica; J. G. Maltman, who has lived here all his life, and is one of the best-posted men on mining in the county; Mr. Adams, the enterprising young agent of THE CALL, and others, I have gathered these notes and made a rough sketch of the Angels mines. It is approximately correct, but does not profess to be absolutely so. A map of this district, showing the parallel veins of the mother lode and their concentration in the great mountain of quartz at Carson Hill, would be extremely interesting and valuable. It may remain for THE CALL to furnish such a map at some future time.

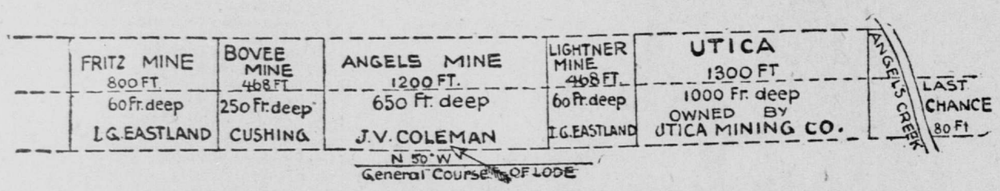
There is nothing new of importance at the Utica. They are bending every energy to getting their big pumps in operation, and expect to have them lifting water in two or three days. They are raising nearly 700,000 gallons a day with present appliances. They expect to exceed 2,000,000 gallons a day with the new pumps, and as it is estimated there are between 45,000,000 and 50,000,000 gallons in the mine, a month ought to see everything working smoothly again.

The people of Angels are improving the occasion and taking a general holiday. Crowds leave every day for the City and the mountains.

C. D. Lane and wife, Mrs. Hayward and others started yesterday morning for a pleasure and business trip to Alaska. Others will join the party at Seattle. They will inspect their great mine and new mill at Juneau. A party of the Utica Company's men have just returned from Alaska, where they have been putting up a thirty-stamp mill for the Juneau Mining Company (Lane and Hayward). From conversations with the returned men I learn that this company has in its Silver Bow properties, comprising twenty-two claims, about four miles from Juneau—probable the greatest gold mine in the world. From the description, it is a mountain of quartz, 3000 feet high, millions of tons being in sight above the surface, which can be quarried and worked for less than $2 per ton. Mr. Lane tells me that it is of higher grade than the Utica, ranging up to $12 or $14 per ton. The only drawback is the fact that the mine and mill have to be shut down for four or five months in the winter. A force of fifty men is employed at present, to be increased indefinitely in the future.

In my next letter I hope to give you some interesting facts about new developments and enterprises on the veins lying parallel to the Utica, both east and west.

A. J. BROOKS.



MINES ON THE UTICA LEDGE AT ANGELS CAMP, CAL.

NATIVE SONS' DAY.

Preparations for the Twentieth Anniversary at Sacramento.

The Native Sons of the Golden West joint committee on twentieth anniversary celebration met last night at Pioneer Hall, Chairman W. H. Hazell presiding.

The committee was informed that the Southern Pacific will run a special train from San Francisco to Sacramento on Saturday, September 7, at 8 P. M., and another on Monday, September 9, at 7 A. M., equipped for carrying 500 excursionists.

Tickets will be good September 7 and 8, and returning on morning train, September 9, on all regular trains for Sacramento. A special will leave Sacramento on Monday, September 9, for San Francisco.

Frank Marston of California Parlor No. 1 was selected to act as grand marshal of the parade through the streets of the city.

Much rivalry is being shown by the various parlors in the matter of bands and position in line. California Parlor No. 1 finding it would lose its position in the line has subscribed a sufficient amount to engage a band and secure its old place at the head of the procession.

Rincon, Mission and El Dorado parlors reported bands engaged and large numbers of new members being enrolled.

The Sacramento committee was represented in town this week by A. J. Barton of the Sacramento committee on accommodations. Mr. Barton says Sacramento is alive with enthusiasm, and much good work is being done by the finance committee among the business men and public spirited citizens.

BIG DEMOCRATS COMING.

Speaker Crisp Will Head a Party of Statesmen to This City.

Evidently Feel the Need of Playing an Aggressive Game Next Campaign.

That the National leaders of the Democratic party entertain grave apprehensions concerning the prospects of party success in the West in the next Presidential campaign, and that they have arrived at the conclusion that the most strenuous efforts will be required to regain the ground that has been lost during the Cleveland administration, or to even maintain the present prestige of the party, is evidenced by a piece of news received in this City yesterday. It was to the effect that a grand effort will be made the coming fall to rehabilitate the party throughout all the Northwestern, the Pacific and Southwestern States by sending a party of distinguished Democratic leaders on a tour of the sections named, to speak in all the principal cities.

The news came in the form of a letter to Franklin K. Lane, of the law firm of Lane & Lane, from the secretary of the National Society of Democratic Clubs at Washington. It stated that a party composed of Senator Morgan of Alabama, "Private" John Allen, Congressman from Mississippi; Chauncey F. Black of Pennsylvania, president of the National Society of Democratic Clubs; Speaker Crisp of the House of Representatives and perhaps one or two more prominent Democrats, would start on a tour of the West early in September, and that beginning at St. Paul they would speak in all the leading cities of Minnesota, Dakota, Montana, Washington, Oregon and California, returning East by way of the Southern or Central Pacific railroads. The letter further stated that the tour would not be made in the interest of any particular Democratic candidate for the Presidency, nor especially in the interest of any particular feature of Democratic policy, but rather for the purpose of arousing the interest and enthusiasm of Democrats generally in an endeavor to effect a stronger organization of the party, that it may be the better prepared for the campaign next year. No announcement of the projected tour has yet been made in the East, nor is the itinerary definitely arranged, but the letter to Mr. Lane comes from a source which furnishes assurance that it will be undertaken. The party will speak in San Francisco under the auspices of the various Democratic organizations and will visit several other cities of the State.

Mr. Lane has an excellent standing among Eastern party leaders, and has been for some years a counselor of the Washington State Democracy whose opinions were much valued. He has only recently returned to California after a long absence, and why he should have been selected to receive the first apprisal of a move which means so much to the Democracy is a matter that is causing many of the faithful, who have been accustomed to being among the first to receive such attentions in the past, to scratch their heads and think. Among some of the latter it seems to be the opinion that the heads of the party in the East will make an effort to get out of the old rut and place the California end of the National campaign in new hands. This phase of the situation will cause the old line Democrats of the State to await further developements in the matter and the arrival of the Eastern celebrities with a great deal of interest.

Saturnine is an astrological term. It was once used to describe the character of an individual born under the influence of the planet Saturn, a malevolent deity.

PILES! PILES! Mac's Infallible Pile Cure. Cures all cases of blind, bleeding, itching and protruding piles. Price 50 cents. A. McBoyle & Co., druggists, 504 Washington street. *

THE BAY DISTRICT RACES.

The Brown Horse Del Norte Runs a Rattling Mile and a Quarter.

TIM MURPHY IN A GALLOP.

After Being Almost Left at the Post, Carmel Won the Hurdle Race Handily.

Jockey Cairns received $200 for winning on Carmel.

Tim Lynch, the owner of Hyman, did not have a dollar bet on his sprinter.

Old Rinfax went amiss the first part of his race and Tommy Smith pulled him up.

J O C, equal favorite with Mestor for the hurdle race, took a bad "header" over the fifth jump. His rider Stewart escaped with a severe shaking up.

But one favorite winning kept the talent hustling to keep on the right side of the fence. One first choice, Little Bob, was defeated through lack of a more experienced rider in the saddle.

The judges fined Stanford who rode Guadaloupe $25 for pulling his horse in next the rail as the field in the hurdle race passed the stand the first time. Guadaloupe is a hard horse to ride, and if there was any interference it was purely unintentional, and the judges must certainly have been at a loss to inflict a fine, especialy in this branch of sport which savors of the rough at all times.

In turf parlance Jack Atkins is said to have "killed the ring" yesterday. The popular young bookmaker was a big winner over the victories of Crawford and Del Norte, and did not book on the hurdle race.

There was some fault found with Piggott's riding of Bloomsbury. The latter horse but recently won a maiden race, and as Lucrezia Borgia looked to be handled with kid gloves by the handicapper on her recent performances, the colt was undoubtedly beaten by a better horse at the weights.

Crawford, winner of the fifth race, entered to be sold for $100, was "boosted" $300 by Bookmaker Billy Beverly, who had him on the list. Charles Boots, owner of Bobolink, the second horse, returned his portion of the run-up money to the owner of Crawford.

Carmel's run was little short of remarkable, and only demonstrates what a very fast horse the chestnut sulker is when he takes a notion to run. He got about fifty yards the worst of the start, but as the field took the first hurdle he was well up in front. That mile work-out of his in 1:39½ at Sacramento some months ago was evidently no myth.

The brown horse Del Norte and Jockey Piggott carried off the honors yesterday. The son of imp. Greenback won the mile and a quarter handicap in the fast time of 2:07¾, and on returning to the stand both horse and rider were the recipient of an ovation. Del Norte was second choice in the betting, the bookmakers laying as good as 3 to 1 against him at post time. Mr. Jingle had first call in the betting, backed from 3 to 2 to 1. Thornhill pressed Del Norte hard for second-choice honors, and the other starters, Arnette, Claudius and Flirtiila, did not lack support.

Jones on Arnette again tried runaway tactics, and as she turned into the stretch for home with a gap of fully three lengths separating her and Del Norte, who had moved up from fourth position, it looked as though they might prove successful. The merry clip had told on her, however, and when Piggott let out a link on Del Norte, the brown horse passed her like a shot, and stalling off the rush of Mr. Jingle on which Weber now made his run, won cleverly by a length and a half. Thornhill took third place in a drive. It was a very popular victory and owner Mat Storn was congratulated on all sides.

Bloomsbury, who recently graduated from the maiden class, was the "hot one" in the two-year-old handicap, going to the post a 2½ to 1 favorite. He looked very much in evidence at one stage of the journey, but succumbed at the end to Lucrezia Borgia, formerly the Ledette filly, second choice in the betting, who won rather handily by a length, running the five and a half furlongs in 1:08¼. Joe K was a fair third, with the others beaten off.

Charles A came out in the opening race of the day, a five and a half furlong dash, after a long rest, and the talent wished he had prolonged his vacation at the conclusion of the race. The "black wonder" was a hot 13 to 10 choice, and he finished such a bad third that a telescope was necessary to place him. In a breath-suspending finish Hyman, the third choice, nosed out the second choice, Abi P, who had made all of the running.

Old Tim Murphy struck a rare soft spot in the second race at five furlongs. There was "nothing in it," and the roan sprinter, a 2 to 5 chance, shook them off like so many fleas and won galloping from Nervosa, with Greenback Jr. in third place.

The fifth race on the card, a cheap mile selling dash, contained a number of unknown quantities, and betting on the race was brisk. Little Bob certainly looked the best of the lot, and he ruled a slight favorite, going to the post with threes about him. Of the rest Bobolink, Rose Clark, Crawford and Miss Ruth received the bulk of the support.

Bobolink led the greater part of the journey until a hundred yards from the wire, when Crawford came on and through Piggott's superior riding won by a head. Bellringer was a good third,

The mile and a half hurdle race was taken by Carmel, who went to the post at 4 to 1 and ran a wonderful race, after getting off away behind his field when the flag fell. A view of the entire race could not be obtained on account of the fog, but as the horses swung into the stretch Carmel was leading, and he won handily in the excellent time of 2:48. The favorite, Mestor, was second, six lengths in front of The Lark.

MULHOLLAND.

SUMMARY.

SAN FRANCISCO, August 3, 1895.

1245. FIRST RACE—Five and a half furlongs; selling; three-year-olds and upward; purse $250.

Ind.	Horse. weight. jockey.	St.	½	Str.	Fin.
1049	Hyman, 93 (Chevalier)	3	2ʃ	2½	1n
697	Abi P, 106 (Shaw)	1	1ʃ	1ʃ	2ʃ
942	Charles A, 105 (F. Jackson)	2	3ʃ	3½	3d
1235	Wild Rose, 96 (Burns)	4	4	4	4

Good start. Won driving. Time, 1:08. Winner, b. g., by Himyar-Maggie B.

Betting: Hyman 11 to 5, Abi P 2 to 1, Charles A 13 to 10, Wild Rose 60 to 1.

1246. SECOND RACE—Five furlongs; selling; purse $300.

Ind.	Horse. weight. jockey.	St.	½	Str.	Fin.
(1221)	Tim Murphy, 109 (L. Lloyd)	6	3h	1ʃ	1ʃ
(1233)	Nervoso, 96 Chevalier)	4	4ʃ	3ʃ	2ʃ
1211	Greenback Jr., 96 (Piggott)	5	2h	4ʃ	3ʃ
1131	Morgan G, 94 (Peoples)	3	6	5	4½
909	Kathleen, 103 (Reidy)	1	1ʃ	2h	5
1233	Rinfax, 109 (T. Smith)	2	5ʃ	pulled	

Fair start. Won easily. Time, 1:01¼. Winner, rn. g., by imp. Kyrie Daly-Maggie R.

Betting: Tim Murphy 2 to 5, Nervosa 9 to 2, Greenback Jr. 15 to 1, Kathleen 30 to 1, Morgan G 500 to 1, Rinfax 15 to 1.

1247. THIRD RACE—Five and a half furlongs; handicap; two-year-olds; purse $350.

Ind.	Horse. weight, jockey.	St.	½	Str.	Fin.
(1222)*	Lucrezia Borgia, 97 (Chevalier)	2	1n	1h	1¾
(1230)	Bloomsbury, 90 (Piggott)	3	3h	2ʃ	2½
1222	Don Gara, 107 (Shaw)	1	2½	3d	3h
1222	Joe K, 102 (Coady)	4	5ʃ	4d	4ʃ
(1226)	Clara Johnson, 87 (Reidy)	6	6	6	5d
1231	Perhaps, 107 (E. Jones)	5	4ʃ	5ʃ	6

*Formerly Ledette filly.

Good start. Won cleverly. Time, 1:43. Winner, ch. f., by imp. Brutus-Ledette.

Betting: Lucrezia Borgia 13 to 5, Bloomsbury 5 to 2, Don Gara 18 to 5, Joe K 7 to 1, Perhaps 6 to 1, Clara Johnson 30 to 1.

1248. FOURTH RACE—One mile and a quarter; handicap; three-year-olds and upwards; purse $400.

Ind.	Horse. weight, jockey.	St.	½	Str.	Fin.
1234	Del Norte, 108 (Piggott)	5	4ʃ	2ʃ	1ʃ
1171	Mr. Jingle, 107 (C. Weber)	6	5h	3h	2ʃ
1208	Thornhill, 108 (Sloan)	3	2ʃ	5ʃ	3h
1234	Flirtilla, 95 (Burns)	4	3½	4ʃ	4ʃ
(1223)	Claudius, 108 (Chevalier)	1	6	6	5½
(1234)	Arnette, 95 (E. Jones)	2	1½	1ʃ	6

Good start. Won handily. Time, 2:07¾. Winner, br. h., by imp. Greenback-Priscilla.

Betting: Del Norte 3 to 1, Mr. Jingle 2 to 1, Thornhill 3 to 1, Claudius 7 to 1, Arnette 10 to 1, Flirtilla 30 to 1.

1249. FIFTH RACE—One mile; selling; three-year-olds and upward; purse $300.

Ind.	Horse, weight, jockey.	St.	½	Str.	Fin.
(1211)	Crawford, 103 (Piggott)	5	3ʃ	2½	1h
1136	Bobolink, 104 (Chevalier)	1	1ʃ	1ʃ	2½
1236	Bellringer, 105 (Shaw)	3	5½	6½	3½
1229	Little Bob, 90 (Reidy)	4	6ʃ	4ʃ	4ʃ
1175	Rose Clark, 101 (Hinrichs)	2	2ʃ	3ʃ	5d
1237	Miss Ruth, 92 (E. Jones)	6	4ʃ	5½	6d
1236	Quarterstaff, 106 (C. Weber)	8	7d	7d	7½
	Huguenot, 103 (Cody)	9	9	9	8½
	Alliance, 114 (Goodman)	7	8d	8ʃ	9

Straggling start. Won handily. Time, 1:43. Winner, ch. g., by Apache-Emma Longfield.

Betting: Crawford 9 to 2, Bobolink 4 to 1, Bellringer 12 to 1, Little Bob 3 to 1, Miss Ruth 9 to 2, Quarterstaff 25 to 1, Rose Clark 9 to 2, Alliance 200 to 1, Huguenot 30 to 1.

1250. SIXTH RACE—One and a half miles; six hurdles; handicap; purse $350.

Ind.	Horse. weight, jockey.	St.	½	Str.	Fin.
1229	Carmel, 127 (Cairns)	6	1d	1d	1d
1224	Mestor, 139 (Hennessy)	4	3½	2ʃ	2ʃ
1227	The Lark, 148 (Piantoni)	3	2ʃ	3½	3½
1224	Ali Baba, 130 (Maynard)	1	6	4ʃ	4ʃ
1224	Guadaloupe, 132 (Stanford)	5	5ʃ	5	5
(1224)	J O C, 127 (Stewart)	2	4ʃ		

Poor start. Won handily. Time, 2:48. Winner, ch. h., by Duke of Norfolk-Carmen.

Betting: Carmel 9 to 2, Mestor 2 to 1, The Lark 7 to 2, Ali Baba 6 to 1, Guadaloupe 8 to 1, J O C 2 to 1.

PASSING OF A PIONEER.

Henry M. Lewis, One of the "Days of Forty-Nine," Died in This City Yesterday.

Henry M. Lewis, an old resident of this City since May 6, 1849, died yesterday noon at 653 Clay street of fatty degeneration of the heart. He left New Orleans for the Pacific Coast in the latter part of '48 and after a perilous trip across the isthmus reached Panama. Here he fell in with Captain A. W. von Schmidt, who, like himself, was bound for the new Eldorado. They, with about forty others, purchased an old schooner named the Dolphin and put to sea. Meeting with light winds, the voyage was lengthened out until their food was gone, starvation stared them in the face. In their extremity they cast lots to see who would offer himself a meal for his perishing shipmates. Before the sacrifice was made, however, another vessel picked them up and supplying them with provisions, they were enabled to make Mazatlan. There they left and their old worn-out craft and took passage in the bark Matilda, reaching San Francisco without any more mishaps.

Lewis, who was a practical jeweler located at the place where his body now lies, and worked at his trade. He was an industrious, peaceable citizen, and as a member of the Vigilance Committee took part in the stirring scenes of that early day.

His age at the time of his death was about 70 years, and he was a native of Ipswich, England. He will be buried from Pioneer Hall to-morrow at 1 o'clock the funeral being conducted by the Society of California Pioneers and Exempt Firemen, of which he was a member. He leaves a widow and daughter.

A. N. TOWNE'S SUCCESSOR.

No One Has Been Appointed Either to Fill His Place or Temporarily Assume His Duties.

J. A. Fillmore, general superintendent of the Southern Pacific Company, denied yesterday that he had been appointed general manager of that corporation as a successor to Mr. Towne. In fact he had not been directed to even temporarily assume the duties of the office recently made vacant by Towne's death.

"I have heard nothing about my appointment to succeed Mr. Towne," he said. "I know nothing about it—except that I have not succeeded him and am not general manager."

H. E. Huntington said that no general manager had been selected, much less appointed, and the whole matter remained exactly as it was on the day that Mr. Towne died. It was doubtful whether there would be any successor, and certainly there would be none until next month.

The extraordinary narrative in a morning paper stating in the same column that Mr. Fillmore "has been chosen to fill the vacancy in the Southern Pacific Company caused by the death of A. N. Towne" and "Fillmore is recognized by the leaders here as the only logical candidate on the coast," lacked one essential—truth.

HOLDEN'S NEW THEATER.

Will Be Erected at Howard and Sixth Streets.

E. J. Holden, manager of the Grove-street Theater, secured a lease yesterday of a lot 100 by 160 feet at the corner of Howard and Sixth streets for the purpose of erecting a new theater.

The building will be of brick and will have a seating capacity of 2800, and will cost $50,000. Mr. Holden expects to begin work on the new building in about two weeks, and hopes to have the theater ready for opening the middle of September.

In the new house Mr. Holden will run a stock company at popular prices, the same as in the Grove-street, and will play stars. He promises some excellent attractions.

Found In the Ocean.

Water that is absolutely pure. It is pumped nightly into the mammoth tank of the Lurline Baths. Free at 10 P. M. *

THE IMPROVED BICYCLE.

Architect O'Connor Thinks He Has Overcome All the Difficulties.

FRICTION NEARLY DESTROYED.

The New Machine Said to Be Capable of Climbing the Steepest Hill With Ease.

Bicycles in bewildering variety are continually appearing on the market these days. There are over 300 makes of cycles, differing only in style, cost and name. Fully 90 per cent of these machines use the chain and sprocket as a means of transmitting the applied power, but owing to the limited leverage and enormous friction it has hitherto been impossible to utilize more than 30 per cent of this force.

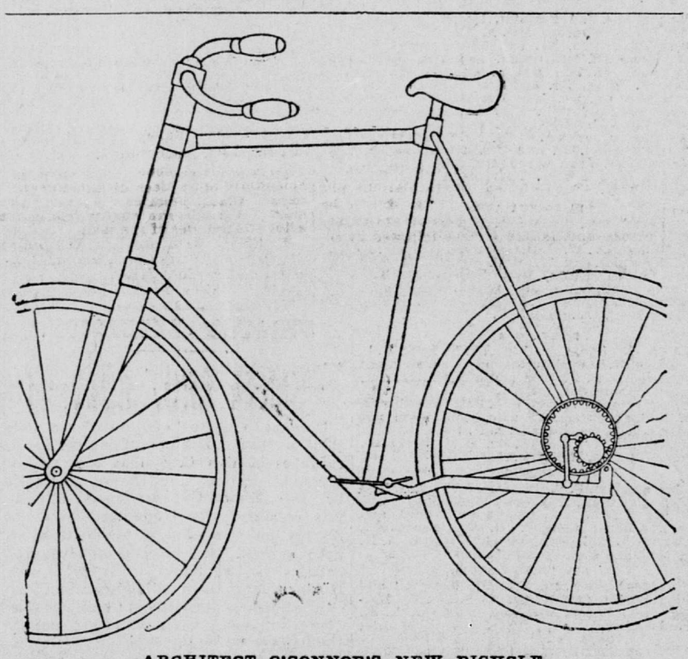
P. J. O'Connor claims to have overcome all these difficulties in a bicycle which he has just had patented. He has been experimenting in this direction for several months, and has at last perfected a machine that does away with sprocket-wheels and chains, makes hill-climbing an easy matter and attains a rate of speed that is only limited to the exertion of the rider. Instead of sprocket-wheels and chain Mr. O'Connor employs a system of cogs, which destroys all friction except at one point of contact. The force is applied by means of a swinging lever, with an adjustable foot-rest, which equally distributes the exertion that must be applied by the rider. The inventor thus describes his cycle:

The accompanying diagram represents my idea for a bicycle that will give the best results for the power employed. In my machine I propose to substitute a swinging lever for the chain and sprocket wheel of the bicycle now used. The rise and fall of the lever does not exceed 10 inches, though if great speed is desired this can be given a fall of 11½ inches. The ankle of the rider passes through a flat segment of a circle 20 inches, and it gives as a result a stroke of nine-sixteenths of the diameter of the driving wheel. This result cannot be accomplished by a stiff lever, for the reason that its motion does not give half a revolution, and consequently it does not pass the dead center. A stiff lever also requires the momentum of the wheel to carry it around.

The foot of the rider rests upon a pivoted plate made to the shape of the foot, so that at the commencement of the motion the full leverage or power is present and so continues for three-fifths of the down stroke. The other two-fifths, which is the full depth, is four inches less. The levers work in double slots to prevent side action, so that there is an alternate rise and fall, thus giving them full play and receiving the entire weight of the body.

My driving levers have a rise and fall of twenty inches, while by the present chain bicycle the rider's foot travels from thirty-eight to forty-two inches. The levers being nearly double the length of the present pedal cranks, I am able to obtain about 80 per cent of the applied power, and consequently a higher rate of speed.

Mr. O'Connor has exhibited his model to a number of bicycle experts, and they are of the opinion that he has solved the problem of securing the greatest amount of force from the power employed. The United States Government has its experts at work endeavoring to overcome the force lost by friction, but so far they have thought of nothing better than the chain and sprocket wheel. The Presidio officers think Mr. O'Connor has not only done this, but has invented a machine capable of climbing any incline short of a precipice.



ARCHITECT O'CONNOR'S NEW BICYCLE.

FOR BITUMINOUS PAVING.

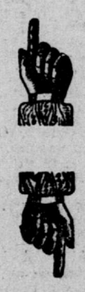
Folsom-Street Property-Owners Will Continue the Agitation.

The Folsom-street property-owners and others interested in the paving of this thoroughfare with bitumen from Nineteenth street to the water front, are not disposed to give up the fight, and a general move is on foot among the several improvement clubs for renewed agitation in the matter, with the possibility of a mass-meeting at Metropolitan Hall in the near future.

Dr. T. A. Rottanzi, president of the South Side Improvement Club, says that his organization is in the fight to stay. A. B. Maguire and other leaders in the movement express like sentiments.

New Jersey is by no means poor. Its real and personal property is valued at $702,518,361.

For Tender Feet



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Goodyear Welt Shoes

Your shoe dealer knows about them.

Goodyear Welts are LEATHER SHOES—not rubber. (32)

NEW TO-DAY.

THIS IS THE 11TH TIME

We have made the now celebrated

"Red Letter Days"

the opportunity of the year. Do you know what they mean?

JUST TWELVE

Days this time, beginning

TO-MORROW

And ending Aug. 17th

Carpets . Rugs . Mattings

CALIFORNIA FURNITURE COMPANY

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Boy's Waverley $40 Waverley BICYCLES. Girl's Waverley $45

WHEELS ON EASY TERMS

LADIES 20 LBS. DROP OR DIAMOND $75

22 LBS. SCORCHER $85

For a Limited Period we Will Sell the Waverley BICYCLES

$11 DOWN, $2.50 PER WEEK OR $10 PER MONTH

Do you want any better evidence of our own faith in the Machine we guarantee? We have sold many and we refer to any WAVERLEY Rider.

The U. S. Government has adopted the WAVERLEY for the Military Post at St. Paul. CATALOG AND FULL PARTICULARS ON APPLICATION.

INDIANA BICYCLE CO., 16-18-20 McAllister St., S. F.

CLEVELAND BICYCLES ARE SWELL WHEELS.

FAST, STRONG, DURABLE, POPULAR.

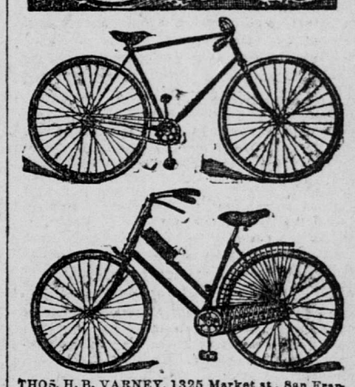
Comparison will convince you of the many points of superiority of the

CLEVELAND

Over All Other Makes.

LEAVITT & BILL, 303 Larkin st., Corner McAllister.

PAMBLER BICYCLES



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ON

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New and Old Bought and Sold.

OLD BOOKS TAKEN IN EXCHANGE

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Primary.

LARGE STOCK OF SCHOOL SUPPLIES.

VAN NESS BAZAAR,

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TWO BIG STORES,

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