

MARS IS ONLY 34,648,000 MILES AWAY SO HAVE A LOOK TONIGHT

By DAVID DIETZ
Science Editor of The Times

ASTRONOMERS all over the world are praying for a cloudless night tonight. The reason is this:

The planet Mars tonight will be closer to the earth than it has been for the preceding century or than it will be for the next century.

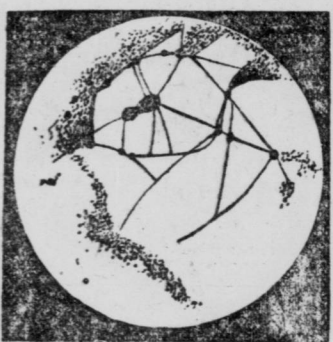
Mars is only 34,648,000 miles away tonight.

They are hoping that the view will throw much needed light on such disputed questions as to whether Mars has an atmosphere or whether Mars is inhabited.

It is within the range of possibilities that tonight's work may solve the Martian question.

REFERENCE to the accompanying diagram will show why the distance between the earth and Mars varies.

Both the earth and Mars revolve



DRAWING OF MARS BY THE LATE PROFESSOR LOWELL.

around the sun. The earth is approximately 93,000,000 miles from the sun. Mars is approximately 141,500,000 miles from the sun.

Now in general, Mars and the

earth are closest to each other when they are in what astronomers call opposition. That is, when they are both on the same side of the sun and when a straight line drawn from the sun to Mars passes through the earth.

But the orbit of Mars is a flattened circle, and accordingly its distance from the sun varies. Therefore the distance between the earth and Mars at opposition depends upon where Mars is in its orbit.

If opposition takes place at the astronomer calls aphelion—when Mars is farthest from the sun—it will be 63,000,000 miles from the earth to Mars.

But if opposition takes place when Mars is closest to the sun—at what astronomers call perihelion—then the distance will be only 34,648,000 miles.

And that is just what happens tonight.

THE discussion over Mars was precipitated by an Italian astronomer named Schiaparelli in 1877.

The first map of Mars had been drawn by astronomers in 1840. But until 1877, no one noticed anything unusual about the planet.

Then Schiaparelli announced that he could see dark markings on the planet. He called them "canals." Italian for "channels." But the word was translated into

both English and French as canals.

The battle was on at once. Other astronomers disagreed with Schiaparelli. It was not until 1886 that another astronomer agreed with him.

In 1892 Professor Percival Lowell of Boston built an observatory at Flagstaff, Ariz., equipped with a twenty-four-inch telescope. He became the most famous exponent of the theory that there were canals on Mars and that Mars was inhabited.

But the late Professor Barnard, considered the greatest authority on planets, although he used both the thirty-six-inch telescope at the Lick Observatory and the forty-inch telescope at the Yerkes Observatory, was never able to see any canals on Mars.

Barnard, however, was able to detect certain changes in the general appearance of the planet with the change of seasons.

Astronomers unable to see the canals say that the others see the canals as a result of a trick of

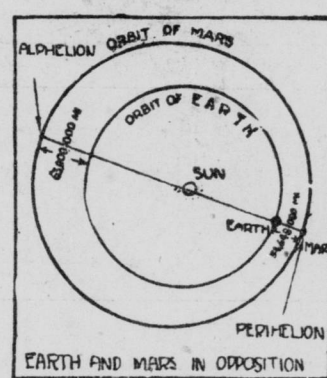


DIAGRAM SHOWING POSITIONS OF SUN, EARTH AND MARS.

psychological optical—their eyes show them what they want to see and not what really exists.

MARS has a diameter of 4,200 miles, about half the diameter of the earth.

The planet has two moons, but they are so small that a large telescope must be used to see them.

The planet rotates on its axis in 24 hours, 37 minutes and 22 seconds. It revolves about the sun in 689 days. Each season on Mars therefore, would be twice as long as on earth.

There is considerable doubt as to the existence of an atmosphere on Mars. Spectroscopic evidence is against it. Clouds, however, are observed above the planet, but many astronomers think they are dust clouds and not water vapor.

The planet has white polar caps which expand and shrink with the season.

The astronomers who believe Mars is inhabited think they are ice caps. Others think they are only frozen carbon dioxide.

REWARDS SPUR POLICE ON TRAIL OF ELKS VANDALS

Prosecutor Also Says He Has Evidence for Grand Jury.

Work of apprehending the vandals who entered the new Elks Club Bldg., under construction at Meridian and St. Clair Sts., and caused damage to metal doors and window casings to the extent of \$10,000, is progressing satisfactorily, according to report of detectives assigned to the case today.

The reward of \$1,000 offered by the Dahlstrom Metallic Door Company, Jamestown, N. Y., and an additional \$100 by the Bricklayers and Masons Union No. 3, spurred activities of police.

John J. McNamara, business agent for the structural iron workers, who refused to sign a resolution adopted by the Marion County Building Trades Council condemning acts of vandalism and pledging aid of the council in running down the vandals, today refused to make any explanation.

"I have not a word to say," McNamara said.

Sperlin Explains

C. D. Sperlin, business agent for the Sheet Metal Workers' Union, who also refused to sign the resolution, said he only did so because he had no authority to do so from his union.

"Personally, I endorsed every word in the resolution," Sperlin said.

The Sheet Metal Workers' Union, in a meeting on Thursday night, unanimously adopted a resolution similar in text to that of the Trades Council. The resolution pledged support to civil authorities in apprehending vandals in any acts of sabotage or violence.

Prosecutor William H. Remy is making thorough investigation of the vandalism through his office, and states he expects to have evidence for the grand jury, which convenes Sept. 1.

Editor Plays Act

Don Campbell, editor of the Indiana Construction Recorder, official publication of the building contractors of Indiana, commenting on the recent labor troubles, declared the acts committed at the Elks Club outrageous.

"There is a national board of jurisdictional awards, created for settlement of jurisdictional disputes, but it appears all over the country this board is disregarded by men of the locals who try to settle matters for themselves," Campbell said.

"There is no doubt that destruction of property in such manner and under such conditions will have a serious effect on the building situation if permitted to continue. Business men are not going to put their money into new building projects if they have the least fear they are going to lose from any such causes. It is easy to see who would be hurt the most."

NECKS STRETCH TO SEE PLANET MARS

Neighboring World Near Us Can Be Viewed After Sunset for Several Days, Astronomers Say.

There was Jackie Coogan, Baby Face, Patsy Arduche. Then comes Ringling Brothers Circus. But before that is Mars! Mars will give a free exhibition lasting all night, Friday. And at the rate Joe Boyer will come this way again for about 124 years.

Mars will be closer to the earth Friday night than it has been since 1877. It is usually somewhere in the neighborhood of 200,000,000 miles away, but at present it is kindly coming around to show itself off and will approach the earth as near as 34,000,000 miles!

Thirty-Nine-Year Trip

And what's a little distance like that? Its only equal to 13,600,000 trips around the Indianapolis speedway. And at the rate Joe Boyer traveled in the last race he would only have to keep his Duesle going for 14,158 days or about thirty-nine years.

Mars is visible to the naked eye from a short time after dark until almost sunrise, according to John C. Dean, Indianapolis astronomer, who has studied the planet for years.

Appear After Sunset

"Friday night Mars will appear in the southeastern part of the sky right after sunset and will be visible until sunrise," Dean said. "It is distinguishable by its bright reddish color. Its brightness will not lessen perceptibly for five or six days, as it is near the earth for several days."

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The Indianapolis Building Contractors' Association, it is said, has called a meeting to discuss the matter.

A mass meeting of the members of the Marion County Trades Council will meet at 230 Saturday for purpose of adopting the resolution passed by the executive council Thursday.

CITY NAMED DEFENDANT

Damages of \$10,000 are asked in a suit filed today in Superior Court by Mrs. Hettie M. Hance, wife of John Hance, a farmer living south of the city, because of injuries she claims she received from riding in an auto over Shelby St.

Indianapolis is defendant, because the street "was negligently allowed to become out of repair." The plains if says there were many holes in the street, varying in depth from three to ten inches.

Dean disagrees with some astronomers who claim Mars is inhabited.

"If it is inhabited," said Dean, "the inhabitants are certainly not anything like human beings. Nature does not produce things alike. It is too cold there for people like us to live."

Years Twice as Long

The years on Mars are twice as long as the years as we know them, according to Dean, but the planet turns on its axis every twenty-four hours, as the earth does. So the year there has about twice as many days as ours does.

"The length of the years causes the seasons to be altogether different from ours," said Dean. "They are having spring there now. One can see, through a powerful telescope, what is thought to be the southern polar cap of the planet."

"The polar cap appears to be decreasing in size and is thought to be ice and snow as we have it in the earth's polar regions."

"I don't think much of the ideas of wireless messages between the earth and Mars," he continued. "It is altogether too visionary. We have no reason to think they have developed wireless. We have had it only a short time."

"I don't think Mars is any older than the earth. According to Moulton's planetesimal hypothesis the planet was all created at the same time. So Mars, if it is inhabited, has probably not made any more progress than we have."

FIRM PREDICTS NEW PROSPERITY

Nordyke and Marmon Hiring 100 Men a Day.

Increasing "sound prosperity," with demand for real values, was predicted today by G. M. Williams, president and general manager of the Nordyke & Marmon Co. He said his company has been adding 100 men a day for the past week to speed production.

Sales for the past two months have been 54 per cent larger than last year, he said. He predicted fewer automobiles would be produced in 1925. Too many were built in 1923, he said.

Nordyke & Marmon's extension program includes expenditure of \$4,000,000 for labor and \$5,000,000 additional for material, Williams said.

'Real Silks' Have Rootin' Tootin' Time at Frolic



ABOVE: FIVE ROOTERS FOR "REAL SILK" AND THE TEN REASONS. THEY ARE (FROM LEFT TO RIGHT): MISS MARY KINNAMAN, 631 E. MARKET ST.; MISS LOUISE VICE, 1049 S. STATE AVE.; MISS LILLIAN NIEBKE, 1554 ASHLAND AVE.; MISS DOROTHY WALKER, 1520 E. SEVENTEENTH ST.; AND MISS IRMA HAMLIN, 2066 PARK AVE.

BELOW: ROOTERS CHEERING FOR J. A. GOODMAN, PRESIDENT OF THE REAL SILK HOSIERY FACTORY (LEFT), AND H. V. KOBLIN, PRODUCTION MANAGER (RIGHT), IN A RACE ON THE MINATURE RACE TRACK AT BROAD RIVIER. ARTHUR ZINKEN, IN CHARGE OF THE PICNIC, IS ACTING AS STARTER.

TURED and unburned, but oh, so glad they went, "Real Silks" today achingly went about their daily tasks.

All warmed up to the occasion were the 2,000 employees of the Real Silk Hosiery Company at the picnic at Broad Ripple Thursday. Despite the heat, however, there was no end of fun. At \$15 machine loads of employees and managers left the mill, 624 N. Noble St., in the wake of the Indianapolis Military Band, and boisterously waved good-bye to the sweltering toilers of the town and "beat it" for tall timber of Broad Ripple.

Events of All Kinds

The picnic was given under the auspices of the Employees' Mutual Benefit Association and under the direction of Arthur Zinken, assistant to the president and head of the department of industrial relations. Other officers of the organization are J. A. Goodman, president; W. C. Koblin, vice president and manager of the sales organization; L. L. Goodman, secretary and treasurer; H. V. Koblin, assistant to the president and production manager.

Nothing was left undone for the enjoyment of this "day off," and don't think it wasn't enjoyed a plenty.

MRS. MORS' BODY ON WAY TO EAST

McCoy, in Jail, Asks About 'Tessie's' Funeral.

By United Press

LOS ANGELES, Cal., Aug. 22.—While Kid McCoy continues his inquiries about "Tessie's" funeral, the body of Mrs. Theresa Mors, for whose slaying the former fighter is now awaiting trial, began its long journey to New York today.

An expensive casket, concealed in plain pine boards, which protect their contents, held all that remained of the woman who, seeking romance and love, found death.

The casket came to the railroad station unaccompanied by friends and without even the tribute of flowers.

The body will be received in New York by Mrs. Mors' mother, Albert Mors, divorced husband of the dead woman, will remain here.

LAW VIOLATION CHARGED

Illinois Man Arrested After Serving Penal Farm Term.

Everett Harvey, Du Quoin, Ill., was removed from the Marion County jail today to Danville, Ill., to answer to charges of violating the Mann white slave traffic act.

Harvey was arrested at Putnamville, where he completed a term in the penal farm. Harry Wertz, deputy United States marshal, took Harvey to Illinois on a removal order from Judge George W. English.

plenty. The customary peanut races, 100-yard dashes, baseball games for the girls who had worn their trusty knickers and cracker eating contest for the kiddies, filled the program with joy unconfined. Immediately after a picture was taken of the entire group, six girls in fancy costumes distributed generous sized wash cloths which came in uncommon handy for mopping heated brows the rest of the day. The wash cloth girls were Misses Louise Acton, Pauline Renfro, Helen Way, Fern Bowers, Gertrude Smith and Viola Chittenden, Miss Bowers and Miss Smith entertained with ukulele songs while this was going on.

"Puts Leaven in Dough"

"L. L.—He Puts the Leaven in the Dough," said one of the signs hung over the "race track." The reference, of course, was to L. L. Goodman, "their buddy and friend." A large red and white banner over the band stand was a constant reminder of the spirit of the occasion as well as that which apparently pervades the factory organization. "J. A. (Goodman), a perfect product is our pledge to you for the confidence you put in us."

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