

PLANETS NEAR EARTH, SCIENTISTS READY

Astronomers Hope to Get Good Glimpse of Planet Between June 10 and 18

ONLY 42,300,000 MILES OFF

Mars and the earth will be only 42,300,000 miles apart on June 18, and this is only a step in the distance separating the planets will be but slightly greater, this will be in the most favorable opposition, when light conditions will be best.

For this reason, in the period between these dates, astronomers are hoping that new facts bearing upon the long-discussed possibility of life on Mars may be brought to light in observations through a great one hundred-foot telescope, the largest in the world, recently placed in the observatory at Mount Wilson, Calif.

"Mars is the most favorably situated of the planets for observation," said the Rev. Walter A. Matos, of Swarthmore, an astronomical authority.

At certain times, when the motions of the earth and Mars around the sun bring all three in a straight line, or in opposition, as we call it, Mars is in the right position to be observed.

"Such an opposition occurs on June 18, at 10 o'clock (daylight-saving time). The hour will be different, of course, for other spots on the earth's surface. During this opposition it is expected that observations of Mars will be taken, which, on account of the large size of the new telescope, may well reveal hitherto unknown data about Mars."

Light Conditions Good The reason why the planet's opposition is so favorable for observation is that at that time, being almost exactly on the other side of the earth from the sun, the sun's rays are reflected directly back toward the earth, thus making the planet particularly bright and distinct.

"Not only will this be a splendid opportunity for observation on account of the opposition of Mars," continued Mr. Matos, "but this particular opposition is also unusual in that the planets are unusually close to each other, thus making observation doubly easy."

The average distance between the two planets when they swing into opposition to each other in their orbits is about 48,600,000 miles. This varies, sometimes being as much as 63,000,000 miles and at other times only 33,000,000 miles, the closest the earth and Mars can ever approach. This time there will be 42,300,000 miles between them.

Such figures are large to use even in astronomical calculations. Therefore, the astronomer is forced to compute the distances of the furthest bodies in terms of light years, or the distance a ray of light can travel in a year.

"So distant are the spiral nebulae, that some astronomers think them to be islands, complete universes in themselves, utterly removed from ours and all others."

"In other words, a human being, reappearing in the spiral nebulae, and looking up into the sky would see our universe, including all the stars and planets which we see in our sky (exclusive of the nebulae themselves), as a mere speck of luminosity among the stars which we train our telescope upon the spiral nebulae."

This conception, together with the astronomical thought that we see light from such bodies has been 60,000 years in reaching us, and that we see them only as they were 60,000 years ago, gives a feeling of almost boundless immensity to the universe. The latter, so to speak, is right next door.

"The discovery by Schiaparelli of the 'canals' or channels on the surface of Mars, there has been speculation as to the existence of intelligent life upon the planet."

The fact they extend for hundreds of miles in straight lines across the Martian surface, often joining at central points, and many observers, notably Prof. Lowell, of Harvard, believe that these marks are great irrigation canals, constructed by the inhabitants to conserve their supply of moisture.

Former Theory Disproved "They have at length served to disprove the theory, held as late as 1877, that there are lead and sea areas on Mars, for the canals cross the supposed oceans," said Mr. Matos.

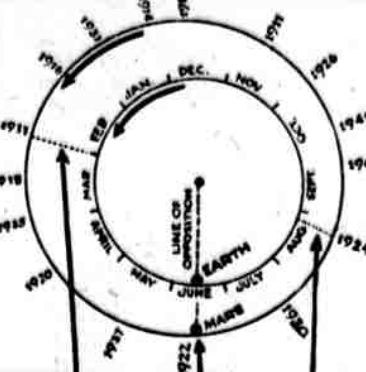
"Mars has, as now seen, just as the earth has, and as a matter of fact, the temperature of Mars, being further away from the sun, is apparently colder. The theory has been advanced that the poles are really frozen carbon dioxide gas, which is used to charge soda water."

Mars differs from the humdrum old earth in many interesting ways. In the first place, the Martian year is almost twice as long as the earthly one, being 687 days, although its days are about the same in duration, i. e., twenty-four hours and forty-seven minutes and 22.67 seconds.

Gravity is not so potent a force on Mars as here, and a human being, upon being transported suddenly to that planet, would experience some embarrassment in keeping himself on the ground.

Also, if there is no atmosphere to speak of on Mars, the Martian sky, seen from the earth, must present a very much like ours at night, except for the beautiful blue color of our own sky, due to the diffraction of the sun's rays in our atmosphere.

When Mars Nears



On June 10, the sun, the earth and Mars will be in opposition, as shown in the above diagram, as viewed from the earth, when the distance between the two planets, will be 42,300,000 miles, combined with unusually good light conditions caused by the opposition, will afford a rare opportunity to examine the planet.

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Thus the surface of Mars during the daylight hours, and all the heavenly bodies would be visible, except those hidden by the sun itself.

Most Variable of Planets "Mars is the most variable of all the planets in its orbit, with the exception of Mercury," said Mr. Matos. "The earth is third in order of distance from the sun, and Mars is fourth. It is found in an orbit which immediately in-

DRUG TO DISPEL FEAR DISCOVERED

Columbia Dean Reveals Findings at H. K. Mulford Co. Dinner

NARCOTIC CALLED "CAAPI"

The discovery of a drug known as "caapi" which apparently has the power of banishing fear, was announced in this city by Dr. H. H. Rusby, dean of the College of Pharmacy of Columbia University.

Dr. Rusby spoke last night at a dinner in the Manufacturers' Club in honor of members of the Mulford biological expedition. The scientists hunted in South America for new drugs.

The pharmacy school dean said he has two pounds of "caapi," virtually all there is in this country, but that the amount is not large enough for experimental purposes. A larger shipment is expected in a month or so, he said, and complete tests will be made.

Chemists who attended the dinner thought invariably what a boon "caapi" would be to married men returning home late without an excuse. Dr. Rusby said the drug was found by Dr. Orland E. White, a member of the expedition.

Its story, as related by Dr. Rusby, is as follows: "The drug has been used for years, according to one or two meager but authentic accounts, by the Indians of Colombia before going into battle. It is prepared from the roots of a plant, the preparation of the drug is marked by great ceremonial rites, which the eyes of women are forbidden to see. The penalty for a woman to see it administered to a man is death.

A ceremonial dance accompanied the drinking of the drug. When it is given a convulsive trembling is produced, the blood leaves the face and pallor ensues. But after a few moments the blood returns to the head and the sort of courage that would make a cat spit into a bull's face" courses in the blood of the drinker.

Another drug that was found is "mire" and which is expected to have great therapeutic value. It is apparently related to the tobacco plant. The bark of the root is used in its preparation. When taken it paralyzes the motor centers—the user of it is unable to speak or to walk without staggering.

Some hours after it is taken the user is bathed in a profuse perspiration, it is said to be so powerful that it destroys any parasites in the skin.

SAVOY PLAY TONIGHT Seventy Will Participate in "Iolanthe" Operatic Performance

The twenty-first annual play of the Savoy Company will be given tonight, tomorrow and Saturday, in the Broad Street Theatre. Each year the company, which is composed of amateurs, presents a Gilbert and Sullivan opera.

The production is being given as a benefit for the Alfred Reginald Allen Memorial in the department of music. School of Fine Arts University of Pennsylvania. Seventy persons will participate. A dress rehearsal was held last night. Elaborate scenic effects have been arranged.

The cast includes Frank Ward, Leslie W. Joy, John C. Sims, Jr., Nellie Eddy, Anne Guyer, Marie Zell and Mrs. George P. Millington.

CARDINAL DEDICATES ST. AGNES' NURSES' HOME Commencement of Training School Also Held Today

The new nurses' home of St. Agnes' Hospital was dedicated this afternoon in conjunction with the annual commencement exercises of the training school. Today is also the feast of the patron saint of the hospital, St. Agnes.

The dedication brings to a reality a long-dreamed-of project. The new structure is a three-story fire-proof building located at Broad and McKean streets. It has a handsome roof garden and not only is it equipped throughout with modern conveniences, but it is attached to the hospital, but the second floor has a room which has been fitted as a hospital ward where the students will receive instruction in nursing procedure.

Over the main entrance of the building, facing north, is a large group sculpture in bas-relief. The figures of the Mother of Christ, St. Ann, St. Francis and members of the Third Order are carved in stone while the same motif has been carried out in the coat of arms of Cardinal Dougherty which appears on the south side of the building, facing McKean street.

The ground floor contains, besides the kitchen, cafeteria and dining rooms, ample space for a swimming pool which will be installed later. The third, fourth and fifth floors are utilized as sleeping quarters for the nurses. Each one will have a separate room with running water.

BAPTIST UNION MEETS Rev. A. R. Petty Speaks at Annual Gathering

The annual meeting of the Baptist Union of Philadelphia and surrounding towns is being held today at the Temple Baptist Church, Twenty-second and Toga streets.

The afternoon session consisted of a musical program. In the evening will be the election of officers. The Rev. Dr. A. Ray Petty, of Judson Memorial Church, will speak on "Some Obstacles to Americanization."

STRAWBRIDGE & CLOTHIER



To-morrow Choose Holiday Millinery

For all the Holiday occasions, free from care and conventionality, and expressing freedom in countless variations, in sports clothes, particularly in the gay, light little hats that are first to be noticed and last to be forgotten, in any sportive assemblage.

Banded Sailors are Right to the Fore In striking combinations of straws and shades—quite the newest is the irregular basket chip straw, bound in plain colored hemp. (One sketched, \$5.00). Prices \$2.50 to \$8.50.

Felt Hats in All Shapes and Sizes Of felt-and-straw, all-felt and silk-and-felt, \$5.00 to \$15.00. The Natural Leghorn Hats are Charming Many oddly shaped, many smartly contrasted with colored straws. These include the new Radio shape.

Innumerable Little Ribbon Sports Hats Light as a feather and gay as a flower. One sketched (\$10) is of latticed ribbons in a deep azure blue; and the Hat with the cunning cocarde, is of silk and Milan (\$12.00). Prices \$3.00 to \$10.00.

Women's New Silk Dresses Much Under Price \$19.75 to \$35.00

In fact, some are marked at former wholesale prices, and some at less than early-season wholesale prices. Dresses of such fine materials as Canton crepe, Krepe-Knit, crepe de chine, soft taffetas and the elegant velvete.

Some very simply fashioned on plain-tailored lines, others elaborately beaded and embroidered, some in combinations of two colors or two shades—a beautiful variety for selection. Black, rust, brown, gray, henna, navy blue, canna and tan.

The model sketched, of Canton crepe, \$19.75. New Gingham Frocks \$7.50 to \$13.75

These appropriate all the new fashion concepts of the season—in tunics, in panels, in slip-on effects. Many have the great airy sash bows and pretty, fresh, cool-looking white trimmings.

Fine Summer Frocks \$18.50 to \$25.00 The aristocratic linen in charmingly simple styles, linen and voile in various combinations, fine tissues with touches of lacinated Swiss in styles that usually belong to silks. Light and dark effects.

Night Gowns and Extra-size Chemises at \$2.50 Two of the excellent values in the Sale available to women who wear extra sizes. And there are many more that are equally good value.

Night Gowns and Envelope Chemises of soft nainsook, beautifully trimmed with lace and embroidery. Night Gowns with square neck and set-in sleeves—\$2.50 each.

Petticoats—\$1.50 Of long cloth, with an embroidery tulle. Corset Covers—\$1.50 Of nainsook, lavishly trimmed with lace and embroidery.

Battiste Bloomers—75c Cambric Drawers, \$1.00

Chamois-Lisle Gloves, \$1.00 Sixteen-button and Strap-wrist Styles

Every woman will want at least one pair of each of these serviceable Wash Gloves for practical wear this summer. They are the most-wanted imported chamois-lisle, designed and made to fit the hand beautifully. The season's smartest shades—\$1.00 a pair.

Drapery Scrim, 22c Less Than Half Price Just the thing for inexpensive summer hangings! All beautiful designs, chiefly richly colored bird and floral patterns, from which to choose. Only a small lot of this 22-inch Scrim at this low price. So we suggest early selection.

Pretty Morning Dresses Of Checked Gingham \$2.95

Of course, they give that slender, straight effect, with fullness cleverly placed to make them practical. Lavender blue, pink or black checks with white from which to choose in these three models. All in sizes 36 to 46 inches. Sketched at the Left—A new model trimmed with dotted Swiss in shade to match the checked gingham.

A model with white organdie vest, collar and cuffs trimmed with gingham bands. Not Illustrated—A graceful model with panel front and back and a white organdie collar and sash.

Men Who Want the Best Clothes at Right Prices

Should Come Here To-morrow to Meet All Their Needs

Come here, where the assortment is the largest, where the prices are lowest, quality considered, and where only dependable clothing is sold. We are Philadelphia's distributors for Hart, Schaffner & Marx, Stein-Block, Alco and our own exclusive Wickham Suits. Note the lowness of these prices, and to-morrow note the excellence of material, style and tailoring:

Hart, Schaffner & Marx Suits in Smart New Styles \$35

Remarkable Group of Suits in Sports and Other Styles \$25

Handsome Suits of fine All-wool Blue Serge \$29.50

Suits With Extra Trousers, \$23.50

Youths' Suits with Extra Trousers, \$27.50

Two-Piece Suits in Tropical Weaves, \$16.50

Fine Woven Madras Shirts \$1.65

Straw Hats Matchless at \$1.95

Women's Fine Tweed Coats \$18.75

Boys' Sports Shirts Ready 95c

Blue Serge Suits Extra Value \$8.50

Wash Knickerbockers—Well Made \$1.00

White Knickerbockers \$1.25

White Knickerbockers \$1.50

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White Knickerbockers \$2.00

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White Knickerbockers \$2.75

White Knickerbockers \$3.00

PENROSE GHOST REFUSES SOCIAL CALL ON RINEHARTS

Hasn't Yet Learned to Ring Bells or Rock Chairs in Washington Apartments of Novelist

Washington, May 25.—It was a good story, full of ghostly detail, bells rung by a hidden hand, chairs rocked by an unseen force, newspapers "read" by unseen eyes. Only it never happened.

Taken it from Mary Roberts Rinehart, author and novelist, and her husband, Dr. Stanley M. Rinehart, a medical expert and scientist, the ghost of Boies Penrose has not even dropped in for a social call since they leased and moved into the former Penrose apartments in Wardman Park Inn.

Chairs have stayed in their accustomed places, and rocked only when somebody rocked them. "Boies has been here," she was no foundation for such a story. It is absurd. The writer committed a terrible faux pas.

But then—though the doctor did not do it—Mrs. Rinehart herself was in the room. She had just returned from a social call on the Penrose family, at the office of the Finance

S. & C. SPECIAL HOUSEKEEPERS' Corsets

The best inexpensive Corsets made. Designed for larger women of average figure, and larger women who desire comfortable Corsets on smart lines that are extra durable. All are reinforced over the abdomen and substantially boned with graduating front clasp.

Prices \$1.50 to \$7.00

At \$2.00—A model of pink coutil, with low bust and long hips, also a model with semi-elastic top higher in back.

At \$2.50—White coutil with medium bust, long hips.

At \$3.00—A medium-bust model with an elastic section in the skirt at the back.

At \$3.50—A low-bust model with long hips and elastic back section.

At \$4.00—A model of pink coutil, with low bust and long hips, also a model with semi-elastic top higher in back.

At \$4.50—White coutil with medium bust, long hips.

At \$5.00—A medium-bust model with an elastic section in the skirt at the back.

At \$5.50—A low-bust model with long hips and elastic back section.

At \$6.00—A model of pink coutil, with low bust and long hips, also a model with semi-elastic top higher in back.

Men's Summer Furnishings in Very Extensive Array

Everything in Furnishings that a man could possibly want for his holiday and summer use—Neckties, Belts, Collars, Handkerchiefs—at these prices:

SOFT COLLARS, made by the best manufacturers, in correct styles—20c, 25c, 30c and 40c.

BOW TIES, in a profusion of dots and figures or other shades—50c, 75c, \$1.00, \$1.25, \$1.50, \$2.00 and \$2.50.

HANDKERCHIEFS, of plain linen—25c, 30c, 40c, 50c, \$1.00 and \$1.50.

INITIAL HANDKERCHIEFS, of fine linen—50c, 75c and \$1.00.

FANCY LINEN HANDKERCHIEFS, in plenty of styles—75c to \$1.00.

ARM BANDS, of 25c and 50c.

FOUR-IN-HANDS, a great variety, every conceivable pattern and coloring—50c, \$1.00, \$1.50, \$2.00, \$2.50, \$3.00, \$4.00 and \$5.00.

TAPE BORDER HANDKERCHIEFS, of white linen—50c, 75c and \$1.25.

GARTERS, prominent brands—25c, 30c, 50c, 75c.

SUSPENDERS—75c, \$1.00 and \$2.00.

BELTS, of several kinds—50c, \$1.00, \$1.50, \$2.00 and \$2.50.

BELT BUCKLES, plain and initialed—\$1.50, \$2.00, \$2.50, \$3.00, \$4.00, \$5.00, \$7.00.

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At \$9.00—A model of pink coutil, with low bust and long hips, also a model with semi-elastic top higher in back.

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At \$10.00—A model of pink coutil, with low bust and long hips, also a model with semi-elastic top higher in back.

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