

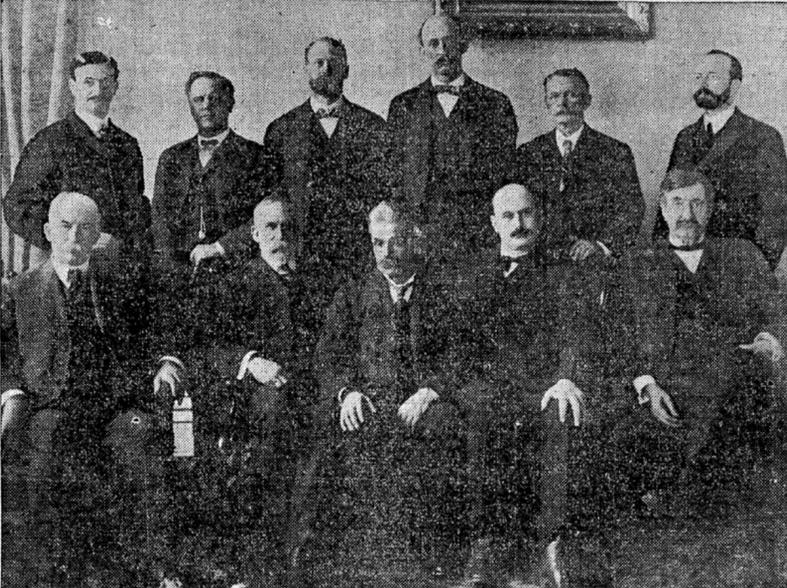
THE GREAT DAN PATCH TO GO AGAINST TIME THE OPENING DAY OF THE GREAT STATE FAIR

EVERYTHING now depends upon the weather, said Secretary E. W. Randall of the Minnesota State Fair today as he turned from the pile of work upon his desk and glanced at the skies as if the omen for fair week might already be seen among the shifting clouds.

Remember Dan Patch Day. While the present state fair is the product of an evolution, and is, consequently largely a development along successful lines of exhibition and amusement, and therefore presents few startling novelties, there are a few things that stand out conspicuously.

being a little vain, and for occasionally glancing towards the stand to see what the people are doing and how they like his work. Some Fast Going. Dan Patch's appearance at the fair grounds will be on Monday, Sept. 4—the opening day of the fair—when he will pace three heats in the afternoon, the first one being the attempt to lower the world's record.

Never has the state fair presented so strong and varied a program as this year. It is outlined below: Monday, Sept. 4—Labor Day. MORNING. 9 a.m.—Official opening of the forty-sixth annual state fair.



THE MEN WHO MAKE THE MINNESOTA STATE FAIR. Standing (beginning at the left)—C. M. Griggs, vice president; J. M. Underwood, superintendent agriculture and horticulture; L. D. Baird, superintendent privileges; G. W. Patterson, superintendent horse division; Dar S. Hall, superintendent police; H. B. Hudson, press manager.

Sitting—Colonel W. M. Liggett, superintendent cattle division; F. J. Wilcox, treasurer; C. N. Cosgrove, president; E. W. Randall, secretary; B. F. Nelson, first vice president. —Photo by Edward A. Bromley.

At the Grand Stand, 1 p.m.—Races—No. 2-210 class, trotting, \$2,500. No. 10-214 class, trotting, one-half mile heats, 1,500. No. 11-214 class, trotting, one-half mile heats, 200. No. 12-214 class, trotting, one-half mile heats, 200. No. 13-214 class, trotting, one-half mile heats, 200. No. 14-214 class, trotting, one-half mile heats, 200. No. 15-214 class, trotting, one-half mile heats, 200.

At the Grand Stand, 8 p.m.—One-half-mile running race, dash. One mile running race, dash. The death-trap loop—hazardous, death-defying. "Loop-the-loop" act by "The Great Babcock."

At the Grand Stand, 8 p.m.—The evening programs are substantially the same during the entire fair. Wednesday, Sept. 6—State and Territorial Day. MORNING. 10 a.m. to 12 m.—Band concert by Libera's famous band, bandstand near main building.

At the Grand Stand, 1 p.m.—Races—No. 2-215 class, pacing, \$1,000. No. 10-215 class, trotting, one-half mile heats, 1,000. No. 11-215 class, trotting, one-half mile heats, 200. No. 12-215 class, trotting, one-half mile heats, 200. No. 13-215 class, trotting, one-half mile heats, 200. No. 14-215 class, trotting, one-half mile heats, 200. No. 15-215 class, trotting, one-half mile heats, 200.

At the Grand Stand, 8 p.m.—The evening programs are substantially the same during the entire fair. Thursday, Sept. 7—Live Stock and Dairy Day. MORNING. 10 a.m.—Remun of Pioneers' association in the log cabin.

At the Grand Stand, 1 p.m.—Auction sale of short-horn cattle under the auspices of the American Short-horn Breeders' association. At the Grand Stand, 1 p.m.—Races—No. 12-219 class, trotting, \$1,000. No. 13-219 class, trotting, one-half mile heats, 1,000. No. 14-219 class, trotting, one-half mile heats, 200. No. 15-219 class, trotting, one-half mile heats, 200.

At the Grand Stand, 8 p.m.—The evening programs are substantially the same during the entire fair. Friday, Sept. 8—St. Paul Day. MORNING. 10 a.m. to 12 m.—Band concert by Libera's famous band, bandstand near main building.

At the Grand Stand, 1 p.m.—Races—No. 20-235 class, trotting, \$2,500. No. 21-235 class, trotting, one-half mile heats, 1,500. No. 22-235 class, trotting, one-half mile heats, 200. No. 23-235 class, trotting, one-half mile heats, 200. No. 24-235 class, trotting, one-half mile heats, 200. No. 25-235 class, trotting, one-half mile heats, 200.

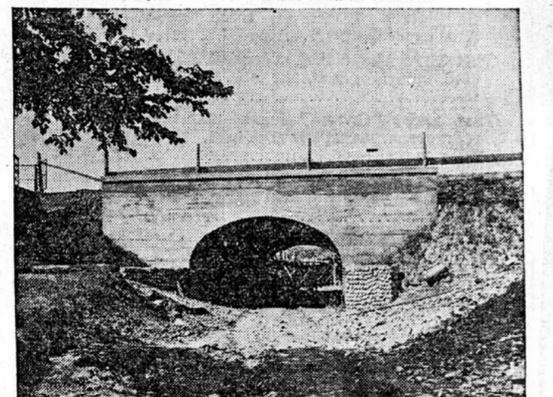
At the Grand Stand, 8 p.m.—The evening programs are substantially the same during the entire fair. Saturday, Sept. 9—Fraternity Day. MORNING. 10 a.m. to 12 m.—Band concert by Libera's famous band, bandstand near main building.

At the Grand Stand, 1 p.m.—Races—No. 26-239 class, trotting, \$2,500. No. 27-239 class, trotting, one-half mile heats, 1,500. No. 28-239 class, trotting, one-half mile heats, 200. No. 29-239 class, trotting, one-half mile heats, 200. No. 30-239 class, trotting, one-half mile heats, 200.

At the Grand Stand, 8 p.m.—The evening programs are substantially the same during the entire fair. Sunday, Sept. 10—The evening programs are substantially the same during the entire fair.



DAN PATCH AT THE MINNESOTA STATE FAIR OF 1903. The picture shows the famous pacer on the back stretch in the great heat when he made the mile in 2 minutes flat. Since that time both the track and the horse have become much faster.



THE NEW SUBWAY UNDER THE TRACKS—STATE FAIR GROUNDS. This improvement does away with the danger of crossing the race tracks at grade. It costs about \$8,000, and is of reinforced concrete construction.

INTERESTING FACTS ABOUT THE ECLIPSE OF THE SUN NEXT WEDNESDAY MORNING

By PROFESSOR H. C. WILSON Of Goodsell Observatory, Carlton College, Northfield, Minn.

ON NEXT WEDNESDAY morning, Aug. 30, will occur the most notable astronomical event predicted for 1905. On that day, near the time of new moon, the moon will come directly in line between the sun and certain parts of the earth's surface, so that its shadow will be cast on those parts of the earth, and as the moon passes the sun will be wholly or partially obscured by the moon. In other words there will be an eclipse of the sun, total at some places on the earth and partial at others.

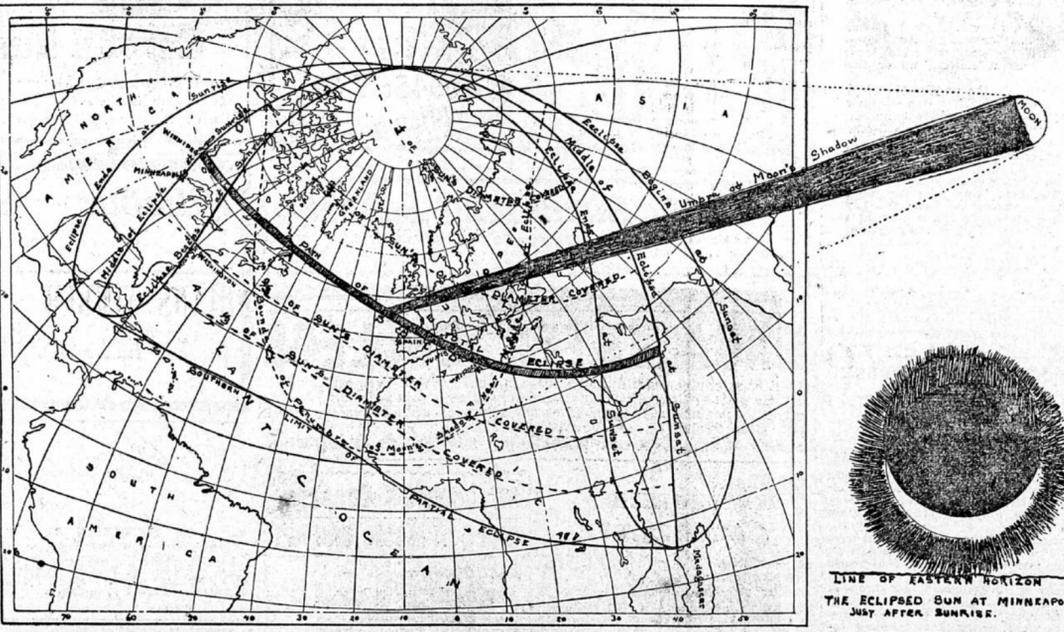


CHART OF THE TOTAL ECLIPSE OF THE SUN, AUGUST 30, 1905.

Unfortunately, at Minneapolis the eclipse will occur so early in the morning that only half of it can be seen. The sun rises at about 5:30 a.m., central standard time, and the middle of the eclipse, when the sun is most obscured, will be at 5:36 a.m. The crescent of the sun remaining unobscured will be concave upward, so that instead of an ordinary sunrise, we shall witness first the appearance of the two horns of the crescent, then gradually, in the course of a minute, the whole crescent. At this time the moon will cover just five-sixths of the sun's diameter, so that it will leave the width of the brilliant crescent at its widest part just one-sixth of the solar diameter. During the next hour the moon will pass the sun gradually toward the east, the last contact being at 6:30 a.m.

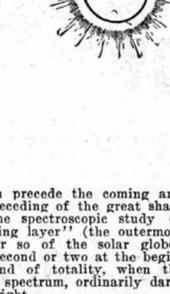
The sun is partly obscured. Dotted lines are drawn on the chart showing where the sun at the middle of the eclipse has one-third and two-thirds of its diameter covered by the moon. Value of Total Eclipse. The phenomena of a partial eclipse are of very little interest to astronomers, but those of the total phase are always regarded of great importance. Total eclipses are exceedingly rare at any one spot on the earth, and the total phase never lasts more than a few minutes. Those few minutes furnish the only opportunities yet discovered for studying the nature of a mysterious something surrounding the sun, which is called the corona. It appears the moment the sun is covered by the moon, and no trace of it can be seen, nor any evidence of it be obtained, by the most delicate apparatus, at any other time. Altho it extends out a million miles and more from the sun's surface, yet it comes but a few feet from the earth without the slightest retardation of their motion. The corona is of a pearly color, and is full of curved streamers of various lengths. It is a fascinating object to look at, either with the naked eye or with the aid of a telescope. Astronomers from many observatories will attempt to get all the data they can with camera, spectroscopes and various other pieces of apparatus, concerning the surroundings of the sun at all the available locations along the path of totality. The United States naval observatory sends out three expeditions to observe the eclipse; Lick observatory three, and Amherst college observatory one. Several astronomers from other observatories in the United States will accompany and form part of these expeditions. Foreign nations will no doubt send many expeditions from their government observatories and there will be numbers of private excursions from parts of Europe near the path of totality.

An eclipse-observing station, in order to be satisfactory, must be near the middle line of the path of total eclipse, and not too near the end of that path, must be on land and must be accessible either by railroad or steamship, and, above all, the weather must be clear. A glance at the chart shows that these conditions, excepting the last, are fulfilled at only five portions of the path of totality, near the points marked A, B, C, D and E. Points of Observation Chosen. At A, on the coast of Labrador, the weather is likely to be bad, but at least two expeditions will go there, one organized by the Canadian government,

another from Lick observatory. Most of the observing parties will locate near B and C, on the coast or on islands off the coast of Spain. In crossing Spain, the shadow passes over no less than fifteen Jesuit colleges, or houses of the society, and this religious body will participate largely in the observation of the eclipse. Lick observatory three, and Amherst college observatory one. Several astronomers from other observatories in the United States will accompany and form part of these expeditions. Foreign nations will no doubt send many expeditions from their government observatories and there will be numbers of private excursions from parts of Europe near the path of totality.

carry the parties to ports near the observing stations. These parties all sailed early in July and are now at their stations, with the apparatus set up and probably adjusted ready for work by this time. Much Apparatus Taken Along. The following list of the more important pieces of apparatus, furnished one of the naval observatory parties, will serve to indicate the pains which are being taken to obtain all the possible results from these expeditions: A horizontal photographic telescope of 5 inches aperture and 40 feet focal length. A photographic telescope, 8.5 inches aperture and 12 feet focus. A 6-inch Dallmeier camera, 36-inch focus. A portable telescope for contact observations. Several grating spectroscopes. Spectral photometric apparatus. Meteorological apparatus. Instruments for determining time, latitude and longitude. Besides the study of the corona, the principal other problems are: The search for planets between Mercury and the sun; observations of the "shadow bands" (bands of alternate light and shade, about six or eight inches

\$100 Apiece for Good, New Jokes



"A good joke is worth money," says Miss Leah Russell, whose Hebrew imitations and real Hebrew melodies are featured at the Orpheum next week. "I have in my bank now, among sundry sums designed for general use, \$500 which I will cheerfully give to any person who can give me five good 'gags' that have not been used in any form and that will fit into my act. Am I joking? Certainly not. Finding real jokes that have the stamp of originality makes looking for a needle in a haystack as easy as running up a laundry bill in Chicago. "I don't bar anybody from this joke competition. The first person who hands me the jokes will get the money, be he Mark Twain, the editor of London Punch or the office boy. The source of the joke is of no consequence to me. It is the laughing result that I want. "I recently offered Ezra Kendall this same \$500 for five good stories that I could use in my monolog, but he evidently needed his stories more than he did my money, for he has never submitted the manuscript. The sun looks large, but good stories are worth \$100 each. I am not out of material, understand, but I believe in looking ahead, and the man who wears a wreath repository wears out, I'll have something new to give the public."

Must Work Quickly. Much of the apparatus is made to work automatically, so that each observer may accomplish as much as possible during the few precious moments available. In Labrador totality will last about two minutes and a half; in Spain it will continue for three minutes and forty-four seconds; in Africa the duration will be less than three minutes and a half; in Egypt it comes down to two minutes and a half. So the work must all be done quickly and the apparatus must work without a hitch, or else the object of so much expenditure of time, energy and money will be defeated. That which the astronomer cannot provide for, with all his skill and pains, is the state of the weather. A cloud coming over the sun at the critical moment may make all his efforts go for naught. But with the wide scattering of the observing stations, some of the parties at least are likely to be successful.

Goodsell observatory sends out no party to observe this eclipse, on account of the great distance to any available station and the necessary expense. At home we can only watch the progress of the latter half of the partial eclipse, taking a few photographs of the partly covered sun and noting the exact moment when the black notch produced by the moon leaves the edge of the sun at about 6:30 a.m. Goodsell Observatory, Northfield, Minn., Aug. 24.

If you are nervous or dyspeptic try Carter's Little Nerve Pills. Dyspepsia makes you nervous and nervousness makes you dyspeptic; either one renders you miserable, and these little pills cure both. Saturday, August 26, Last Trip of Soo Line Saturday Fishing Train. Last trip of the Soo Line "Fish Special," which during the summer has left Minneapolis Saturdays 3 p.m., returning from Glenwood, Monday morning, will be Aug. 26, returning Monday, Aug. 28.