

# THE HEAVENS IN SEPTEMBER

By Prof. Doolittle, Astronomer of the University of Pennsylvania

It is the purely autumn constellations which may be seen covering the face of the sky during the early evenings of September. A last glimpse of the striking summer group Scorpio may still be had, but this constellation is rapidly sinking low down in the southwest and will soon disappear for another year.

Uranus is attended by four small moons, the inner one of which races around the planet in only two and one-half days, while the outer one requires only thirteen and one-half days in which to make the circuit, will be remembered that our own moon goes around the earth in twenty-eight days. While a month on Uranus, reckoning by the nearest moon, is but two and one-half days long, the year, on the contrary, is eighty-four times as long as ours, for Uranus occupies eighty-four years in passing round the sun. Only an inhabitant who lived to a good old age could therefore appreciate the seasons of a four seasons—spring, summer, autumn and winter on this planet.

Figure 1 shows all of the brighter stars to widen until October 27, after which they will apparently begin slowly to grow narrower again. Their appearance will thus gradually change from that shown in figure 5 to a very narrow line as shown in figure 6, and finally, when we arrive in such a position that we view them exactly edgewise, they will disappear from view as they do in the largest telescopes, except with its moons will alone remain visible, as shown in figure 7.

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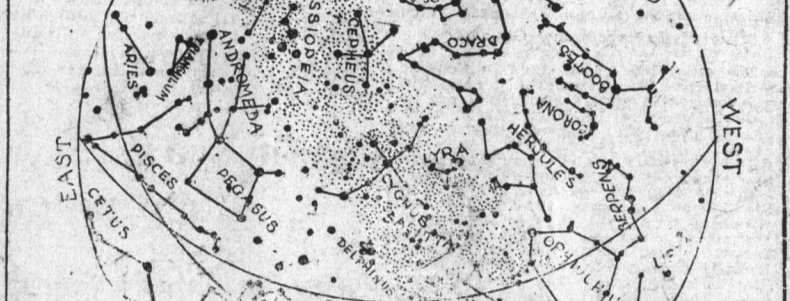


Fig. 1—The Constellations at 9 p. m., September 1.

In the bright group Aquila, or the Eagle, well further south, at the point where the Milky Way meets the ground, is the large faint group Sagittarius, or the Archer. Arcturus, the largest star of the group Bootes, may still be seen shining in the northwest, while directly opposite him in the extreme south-east there is appearing for the first time this year the magnificent Royal Star, Fomalhaut.

The planet Mars is still conspicuous in the southwest, but it will disappear during the month were it not that it has already begun its very rapid eastward motion among the stars. On September 15 it is just about Antares, the fiery red star which will be seen sitting in the extreme southwest, but during the month it will move entirely out of the

stars just as they appear on the sky at 9 o'clock on any of the early evenings of September. If the observer will watch the heavens in the east to take their place, and new groups, not shown on the map, will appear in the east to take their place. A watch of only ten or fifteen minutes will make this very evident. By 10 o'clock the group Aris will



Fig. 2—The square in Fig. 1, enlarged, showing the position of Uranus and surrounding stars.

constellation Scorpius and well into the Milky Way. As will be seen from figure 1, the stars of this group are all moving very slowly toward the east, but will not cross the Milky Way until October 8 at 3 o'clock in the afternoon.

The constellation Aquila, with its more and more favorable position for observation, it is now the brightest object in this part of the heavens with the single exception of Antares, a reddish star, which is much lower down near the ground. The earth is well away from the rings, so that we may look down upon them and see them well opened out. The rings will con-

will compare the planet with the other stars near it, he will soon notice a difference in the character of its light or lustre, while if he has access to a telescope of four or five inches aperture, the little round disc will be very distinctly visible.

high temperature. Its density is still less than the cubic foot of brass would weigh one-fourth as much as a cubic foot of our earth, and apparently many ages must pass away as it shrinks to gether and cools off before it can support any form of life which we can conceive of.

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On figure 2 there are shown a few of the interesting objects in this part of the sky. Each round dot of this figure represents a star of the size of the dot showing the comparative brightness of the stars, while each triangular dot shows the position of a star cluster or nebula. Each double star is marked D, and the clusters with star 2, and each variable star V.

At 10 o'clock, for the purpose of receiving any statements on matters within the scope of their work, and which is described in the attached copy of the memorandum attached to the commission issued to them.

The commission will be obliged if you will kindly make public, in the most available manner, an invitation to all persons desirous of presenting evidence or statements to be presented at their sitting. I am sending a copy of this letter to Mr. Worral, the Mayor, and would ask your kind co-operation in this regard.

Should any unforeseen contingency delay the arrival of the commissioners, the date named, I will advise you by wire. Yours truly, "C. N. BELL, Secretary."

Extract from a report of the committee of the Honourable the Privy Council, approved by the Governor-General on the 19th May, 1902.

From place of production to the western coast of the province of British Columbia, from the western ports of Lake Superior to the Pacific, the route of the Canadian Pacific Railway is the most direct and the shortest route for the transport of goods to the markets of the world.

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## Scope of Inquiry R: Transportation

### Railway Commission to Hold a Sitting here on September 28th.

### Board of Trade is Notified of the Fact—Evidence is Invited.

Notification has been received by the Victoria board of trade to the effect that the royal commission on transportation will hold a sitting here on September 28th.

Composing the commission are: Robert Reford, Montreal, chairman; James H. Amundson, Winnipeg; and C. N. Bell, secretary.

"I think it a wonderful country," he said. "It contains a rich, black, vegetable soil, and can be easily developed. It would require very little clearing and no stumping. The timber is mostly poplar, which does not grow to a very large size. We rode about 70 miles in one day, and we saw very few deer, but a country in every respect. There is a great amount of game and fish, and as rivers, brooks and lakes abound it is an easy matter to get water anywhere."

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## Buys Coal Lands In Nicola Valley

### James Dunsmair Acquires Valuable Property Along Coldwater River.

### Announcement Made That Development Work Will Shortly Be Commenced.

The Nicola Herald, in its issue of Thursday last, made the following important announcement:

During the last week arrangements have been made for coal rights in the Nicola Valley, which looks as if Nicola is beginning to get the prominence it is entitled to.

For some time a deal has been pending to secure the properties, and on Wednesday Mr. Dunsmair was signed, in which James Dunsmair, British Columbia's coal king, has obtained the coal rights of the late William Charter, the late John Charter, the late John Charter, and the late John Charter.

Work is to commence as soon as possible on the Nicola Valley, and the Nicola Valley is to be developed into a coal field.

The prospects for the opening up of the coal lands of the Nicola Valley are assured, before many months have passed. It is expected that the Nicola Valley will be developed into a coal field.

Stuart Henderson, M.P.P., arrived by special conveyance from Ashcroft on Monday, and has been in the Nicola Valley for the week on private business in connection with the Nicola Valley.

General Treppoff refused to grant their appeal unless the present orders in Nicola ceased, and bluntly told them to go.

St. Petersburg, Sept. 1.—A deputa- tion of five persons, headed by a member of the Duma, has been in the Nicola Valley for the week on private business in connection with the Nicola Valley.

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## CLEARING LAND

Modern Methods at Saanich, Clearing a Dairy Farm With a Donkey Engine.

Written for the Sunday Colonist by H. F. Pullen.

While we have been seeking information in the neighboring state of Washington about the latest methods of clearing land these methods have been in operation right in our midst. No farther than north-west Victoria is to be seen the work of George Saenger clearing 20 acres of land on his new farm on the West Road, using a twenty-horse power donkey engine to pull the stumps. The work was done in such a way that the fact that Mr. Saenger intends to continue it during the coming winter.

Fig. 3—Star Clusters as they appear in a small telescope.

Fig. 5—Saturn as it appears now.

Fig. 6—Saturn as it appears when the rings are seen nearly edgewise.

Fig. 7—Saturn when the rings are turned edgewise towards us.

Fig. 8—The Constellations at 9 p. m., September 1.

Fig. 9—The square in Fig. 1, enlarged, showing the position of Uranus and surrounding stars.

Fig. 10—The Horse-shoe Nebula.

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## BUDGET OF NEWS FROM GRAND FORKS

### Recent Discoveries at Franklin Camp—Cyclist Ruas Into a Bear.

Grand Forks, Aug. 30.—Fred Clark, one of the leading mechanics of this place, has just returned from a visit to the Franklin camp, where he has been engaged in the recent discovery of silver-copper ore on the McKimley property.

Clark said: "The McKimley is a very promising property. It was really struck to find such a large body of ore in the tunnel and drift on the McKimley property. This was my first trip up the North Fork, and what struck me most was the apparent richness of the ore body. This was my first trip up the North Fork, and what struck me most was the apparent richness of the ore body."

A cyclist, while riding near the Reliance laundry in the north addition last Saturday, encountered a black bear of goodly dimensions. The cyclist, when at once informed of the presence of the bear, fled in the direction of the laundry, but the bear followed him for some distance.

Brussels, Sept. 1.—Mme. Narychkin, wife of Cyril M. Narychkin, secretary of the Russian Legation, and daughter of M. Witte, the Russian ambassador in London, while leaving the theatre last night, was robbed of a necklace valued at \$5,000. The thief escaped.

Boston's Population. Boston, Sept. 1.—The population of Massachusetts is 2,993,885, according to a preliminary report made today by the state bureau of statistics. This is an increase of 100,000 since 1900, and the last official census was taken in 1900, when the population was 2,893,885, an increase of 99,999 in the past ten years, or 1.35 per cent.

## COMPLICATIONS IN THE COLLINS CASE

### A Possibility of Its Developing Into an International Controversy.

The case of George D. Collins, which has attracted the attention of the public, is now developing into an international controversy. It is now developing into an international controversy. It is now developing into an international controversy.

George D. Collins, a Canadian citizen, has been arrested in the United States on a charge of conspiracy. The case is now before the courts, and it is expected that it will develop into an international controversy.

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