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Contents.

(Illustrated articles are marked with an asterisk.)

Acetylene, notes on... 69
Apprenticeship system, the... 66
Archaeological news, recent... 71
Bicycle frame reinforce, Ide's... 69

PRESENT STATUS OF THE APPRENTICESHIP SYSTEM.

Since the date of our last reference to the apprenticeship system of the United States, the question has experienced one of its periodical revivals, and its pros and cons have received a very thorough discussion.

After carefully following the discussion and gleaning the actual facts, as they have appeared from time to time, one is carried to the conclusion that the apprenticeship system is not so generally moribund as the state of affairs in some particular districts and trades would lead one to infer.

In general, it would seem that the arrangement which is most in favor in the United States is similar to that which was communicated to us by the Brown & Sharpe Manufacturing Company, of Providence, R. I., and commented upon editorially at the time.

This plan, which we think is, on the whole, as good as any that have recently come under our notice, may be taken as fairly representative of American practice to-day. The chief modification has been in the direction of strengthening the inducement for the apprentice to serve the full time of his contract.

In all the discussion, verbal or written, of the past few months there are two encouraging facts which are clearly established and are full of promise for the future of the apprenticeship system. In the first place it is clearly recognized that while the root idea of the old apprenticeship was good, the system must be entirely revised in order to adjust itself to modern conditions.

The other fact in which we find much promise for the future is that, after carefully going through most of what has been said or written on this vital question since we last had it under review, and as the result of our own independent inquiries, it is abundantly evident that the modified form of apprenticeship which is now in vogue is a practical success.

the boys an opportunity to acquire knowledge, if not dexterity, in lines of work to which they do not have access in the shops.

A NATIONAL DEPARTMENT OF SCIENCE.

In a few days a formal recommendation will be submitted to Congress in favor of the establishment of one great scientific department of science in place of the several existing separate government bureaus, which are maintained at great expense for the promotion of science and the development of the resources of the country.

THE HEAVENS FOR FEBRUARY.

BY WILLIAM R. BROOKS, M.A., F.R.A.S.

THE SUN.

On the first day of February there will be an annular eclipse of the sun. It will be visible as a partial eclipse in the United States, and as such only south of a line drawn from Boston in a southwesterly direction through the Middle and Southern States to the southern point of lower California.

Along this path the moon will appear to pass centrally across the disk of the sun; but the relative distances of these two bodies from the earth are such at the period of this eclipse that the moon does not quite hide the entire face of the sun.

An enormous sunspot has been visible on the sun's face during January, and it is quite likely to appear by rotation early in February, although it may be very much changed in both size and form.

The sun's right ascension on February 1 is 21 h. 2 m. 33 s.; and its declination south, 16 deg. 52 m. 33 s.

MERCURY.

Mercury is morning star, reaching its greatest elongation west of the sun, 26 deg. 23 m., on January 15. This will be the best time to look for Mercury as morning star, although its southern declination is unfavorable.

Mercury is stationary on the second, and in aphelion on the twenty-seventh day of the month.

VENUS.

Venus is evening star, and shines with regal splendor in the southwestern sky long after sunset. It reaches its greatest elongation, 46 deg. 39 m. east of the sun, on February 16.

Venus is in conjunction with the moon on the fifth of the month at 5 h. 43 m. in the afternoon, when Venus will be 3 deg. 48 m. south of the moon.

On the first day of the month Venus crosses the meridian at 3 h. 8 m. in the afternoon and sets at 9 h. 10 m.

TABLE OF CONTENTS OF Scientific American Supplement

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