SCIENTIFIC MISCELLANY.

The Flash in Perseus—New Alloys—Hidden Lands for Explorers—Insect Eating Plants—Plague Among the Palms—Elephant Origin—An Unused Material—New Light on Drown—A Timed Flashlight—A Light-Weight Boiler.

The nebula that seems to be spreading from the new star in Perseus not only changes at a perceptible rate but has bright spots on its outer edge that appear to have passed over a minute of arc in six weeks, implying the tremendous velocity of 2,000 miles per second if the nebula is assumed to be at the distance of the nearest known star. It is suggested as more probable that the new star and its nebula are nearer, or that a flash of light may have been sent through the comparatively dark gas without actual motion of the gas itself. The greatest apparent motion of a star in space is 8¾ seconds of arc in a year, which is that of a small star in the southern hemisphere. The famous Groombridge 1830, with a proper motion of 7 seconds a year, taking it across a space equal to the diameter of the moon in 250 years, has a parallax of about 14-100 of a second; and is calculated to travel at a speed of 200 miles a second. The projectile of a modern cannon has a maximum velocity of a little more than ½ mile per second.

Nickel and aluminum have been difficult to alloy on account of the difference between their melting points, which are 1450 and 600 degress respectively. A Berlin manufacturer has overcome the difficulty by a special furnace, and in one case by adding copper with an intermediate melting point. "Nickel-aluminum" contains nickel and copper, with aluminum in greatest proportion, the specific gravity being 2.86. It can be rolled into sheets and has a tensile strength of 16½ tons per square inch. "Minckin" seems to contain more nickel than the 26 per cent of "new silver" and is gaining favor for its resistance to corrosion by weak acids, etc.

About one-fifth of the earth's land surface was known in 1800, states G. H. Grosvenor, and in 1900 only one eleventh was unexplored. The "Dark Continent" of the twentieth century is the land buried under the oceans, an area thrice as great as the exposed land surface.

The areca-nut, or betel-nut, is the fruit of an East Indian palm. It is chewed in great quantities by the Asiatics, who regard it as an aid to digestion and in pharmacy it is used as a vermilide. The present scarcity of the nuts seems to be due to a mysterious plague that has swept the plantations of Lower Bengal. Dense groves of thousands of trees have become vegetable cemeteries in a few months and no parasites or other adequate cause can be discovered. The only explanation offered by Dr. George Watt, after investigation, is "degeneration of tissue," to be remedied by care in cultivation.

A mastodon-like animal from the Eocene of the Linyan Desert is regarded by Dr. Andrews as the probable ancestor of the mammoth and elephant.

Tea-seed, a bye-product of an important industry, is awaiting profitable use. It was placed upon the market in London in 1885, under the name of tanne, but nobody knew what to do with it and there was no sale. An agent of the Indian Tea Association has a report upon the oil and cake. Tea seed oil is clear, light and yellow, with a more or less acid taste and is unsafe as an edible oil on account of its saponin. Tea seed oil cake is by the same constituent made dangerous food for cattle, while as a manure it is much inferior to other oil seed cakes. It is suggested that the oil might prove useful as lamp oil, and that the cake might serve as an insecticide.

The idea that drowning persons take much water into the lungs has seemed to be unquestioned. But it has been long opposed by Prof. W. K. Whitford, who in forty years has successfully treated many patients apparently dead from drowning, and who now asserts as the result of many examinations that practically no water enters the lungs. The mistaken view has caused the waste of much valuable time. He has found heat—energetically and persistently applied—to be the most important agent in resuscitation and with this, aided by artificial respiration and stimulation, he has restored patients that have been submerged an hour.

The advantage of a photographic flashlight that can be timed is claimed for a new cartridge made at Offenbach, Germany, and consisting of a small celluloid powder and provided small celluloid capsule filled with combustible powder and provided with a fuse. The flash varies with the size of the cartridge. Analysis shows that the powder which burns quietly and with little smoke, contains 12 per cent of aluminum, 13.5 of magnesium, 12 of red phosphorus and 73 of stroutium nitrate.

Ether, converted into vapor much more readily than water, is stated to have failed in engines from the lack of a suitable generator. M. Malapert claims a successful generator and that one weighing 265 pounds can supply a 100 horse-power engine.

GRAND JURY PRESENTMENTS.

Little Business Was on Circuit Court Docket for Disposal.

The fall term of the Leon county circuit court adjourned last Friday and the members of the grand jury were discharged.

The court convened with only a few cases on the docket. The grand jury found a number of bills, which added some to the business. The presentments of the grand jury were as follows:

We, the grand jurors, enquiring in and for the body of the county of Leon, fall term circuit court, A. D. 1901, do make the following general presentment:

1st. We find that the clerk of the circuit court, sheriff and county judge have complied with section 3, chapter 4141, laws of 1893, and we file their statements herewith and make same a part hereof.

2d. Under section 17, chapter 4338, laws of 1895, we report as follows: We are glad to state that the public roads and bridges are in a generally good condition, with the exception of the road going over Iamonia slough. and we respectfully call attention of the board of county commissioners thereto and hope that they will take immediate steps to have the same put in proper repair as they as welll as we must realize the fact that good roads and bridges are an absolute necessity in all counties dependent upon agriculture for support and maintenance.

3d. We have carefully examined into all cases submitted to us by the proper authorities, 26 in number, and it is with great pleasure that we note the small amount of crime committed within this county during the past few months, and it shows a source of congratulation to the people of the county.

4th. We have examined into the condition of the county jail and find that the same needs repairs in many respects, viz: there is a bad leak in the main body of the jail which should be fixed at once and there should be a sewer pipe running from the jail to some place where the refuse could be destroyed, and we also find that the ash pile is kept too near the building. We also suggest that the board of county commissioners furnish suitable chairs for both the grand and petit jury rooms.

5th. We tender our thanks to his honor Judge John W. Malone for his able, comprehensive and explicit charges relative to our duties, and congratulate the people upon the rapidity and legal correctness with which the business of the court is disposed of.

6th. We also tender our sincere thanks to our able and efficient State's attorney for his valuable information and services to our body and also to our efficient clerk of the circuit court and sheriff for their prompt attention to all of our requests and to our bailiff for his constant attendance upon this body.

J. A. ANDERS, Foreman.
Attest: P. D. MEMILLY, Clerk.

FOR OVER FIFTY YEARS.

Mrs. Winslow's Soothing Syrup has been used for over fifty years by millions of mothers for their children while teething, with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhoea. It will relieve the poor little sufferer immediately. Sold by all druggists in every part of the world. Twenty-five cents a bottle. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind.

WOMAN'S POULTRY.

Mrs. Blanchard, wife of President Blanchard, of the Washington State Dairy Association, makes a showing for the "business hen" that looks like something of a bonanza. According to the statement of her husband she began three years ago with a modern-built poultry house and about forty chickens. She at the same time posted herself on the best methods by means of poultry lieterature. Care and systematic methods were observed from first to last. Thorough cleanliness in the poultry house, a large dust bath, sufficient grit composed of small, sharp gravel anl clam and oyster shells, and a balanced feed ration consisting of about three parts of wheat and one of corn, together with meat and scraps for the feed, were the underlying principles, and these, coupled with constant care and watchfulness in attention to details in a manner which only a woman has ufficient patience for, was the source of her success. From November, 1899, to November, 1900, 150 hens laid 25,331 eggs, which sold for $421.90. Besides poultry was sold to the amount of $119.57, or a total of $541.28. Deducting feed bill, $175.53, the net profit was $369.95, figuring a net cost for feed 78 cents and net profit per hen $2.79.

The breeds were barred Plymouth Rocks, brown leghorns and black Minorcas.

Besides 400 young chickens were raised, 180 of them sold for $45, leaving 220 pullets at a net cost of $75 for raising.—Commercial Poultry.

GOVERNOR'S APPOINTMENTS.

Many Notaries Public Have Been Given Commissions.

It looks as if nearly everybody you meet is either a notary public, has been a notary public, or wants to be a notary public. The governor's appointments these days are chiefly of this class although one of another character is occasionally recorded.

The following appointments have been made during the past week, and their commissions forwarded by the secretary of state:

William C. Monroe, of Pensacola, to be notary public for the State at large.

Daniel Pippin, of Westville, to be fish and game warden for Holmes county.

Charles C. Martin of Jennings, Lake county, to be notary public for the State at large.

J. M. Phipps, of Key West, notary public in and for Monroe county.

D. W. Yarborough, of Pensacola, to be inspector of timber, lumber and logs in Escambia county.

Alexander W. Turner, of Coe Mills, Liberty county, county treasurer to fill the unexpired term of Newton W. Walden.

Alexander C. Roesch, of Braidentown, to be tax collector of Manatee county, to fill the unexpired term of C. E. McNeill.

Commissions have been sent to the following gentlemen who have been appointed to positions of notary public for the state at large: R. W. Ferguson, Ocala. J. Frederick Cannon, Jacksonville; R. C. Pinder, Key West; C. T. Merritt, Buena Vista; W. P. Woodworth, Diston City.

FOOD FOR RABBITS.

The diversity of opinion that exists among fanciers as to the feeding and treatment of their pets is very pronounced, says the Poultry Monthly. One of the subjects on which rabbit breeders are wont to be greatly at variance is that of green food. The large majority of the breeds find that green stuff is essential to the health and well being of their animals. Dwellers in the country have an advantage over their town brethren in that they can procure a great variety of green food during the spring and summer; chickory, dandelion, hedge, parsley, sow thistle, grass and clover, radish tops, blackberry leaves, turnip tops, fresh pea pods, cabbage and lettuce leaves are easily procured. In towns cabbage, lettuce and dandelion have to be looked to as the chief vegetables.

Chickory, though not often used, is most valuable and beneficial. It is eaten readily by the animals and keeps them in good condition, never giving them the scours.

Cabbage is particularly useful at a time of year when other green food is not to be had. Lettuce is particularly useful for breeding does, although of so watery a nature that it should not be given in large quantities of in wet seasons. Dandelion is another valuable green food. It has a powerful effect on the kidneys, so should not be given for a lengthy period at a time. Hedge parsley is largely used in the country. It must not be mistaken for hemlock, which is somewhat like it and very poisonous.

Wood has been very scarce in Tallahassee this winter. But the experience will not be sufficient to induce the people to lay in a supply during the summer season.

TEN NIGHTS IN A BAR-ROOM.

"No; I believe he means to turn it into some kind of a factory—and, I rather think, will connect therewith a distillery. This is a fine grain-growing country, as you know. If he does set up a distillery, he'll make a fine thing of it. Grain has been too low in this section for some years; this all the farmers have felt, and they are very much pleased at the idea. It will help them wonderfully. I always thought my mill a great thing for the farmers; but what I did for them was a mere song compared to the advantage of an extensive distillery."

"Judge Hammond is one of your richest men?"

"Yes—the richest in the county. And what is more, he's a shrewd, far-seeing man, and knows how to multiply his riches."

"How is his son Willy coming on?"

"Oh! first rate."

The landlord's eyes fell under the searching look I bent upon him.

"How old is he now?"

"Just twenty."

"A critical age," I remarked.

"So people say; but I didn't find it so," answered Slade, a little distantly.

"The impulses within and the temptations without are the measure of its dangers. At his age, you were, no doubt, daily employed at hand work."

"I was, and no mistake."

"Thousands and hundreds of thousands are indebted to useful work, occupying many hours through each day, and leaving them with wearied bodies at night, for their safe passage from yielding youth to firm, resisting manhood. It might not be with you as it is now, had leisure and freedom to go in and out when you pleased, been offered at the age of nineteen."

"I can't tell as to that," said the landlord, shrugging his shoulders. "But I don't know that Willy Hammond is in any especial danger. He is a young man with many admirable qualities—is social—liberal—generous almost to a fault—but has good common sense, and wit enough, I take it, to keep out of harm's way."

A man passing the house at the moment, gave Simon Slade an opportunity to break off a conversation that was not, I could see, altogether agreeable. As he left me, I arose and stepped into the bar-room. Frank, the landlord's son, was behind the bar. He had grown considerably during the year—and from a rather delicate, innocent-looking boy, to a stout, bold lad. His face was rounder, and had a gross, sensual expression, that showed itself particularly about the mouth. The man Green was standing beside the bar talking to him, and I noticed that Frank laughed heartily at some low, half obscene remarks that he was making. In the midst of these, Flora, the sister of Frank, a really beautiful girl, came in to get something from the bar. Green spoke to her familiarly, and she answered him with a perceptibly heightened color.

(To be continued.)