## In the September Sky

The September sky will be alive with clustering constellations that shine with renewed luster in the crisp and pure autumnal atmosphere. Among them may be noted the great square of Pegasus rising in the east, and low down in the northeast is the lovely cluster of the Pleiades. The three stars, Arcturus, Vega, and Capella, known as the northern brilliants, are especially worthy of observation, for they are all visible, and opinions differ as to which is the brightest of the trio. At the close of the first third of the month Arcturus is the brilliant red star near the northwest horizon, and is at the terminus of a line from the North Star through the end star in the handle of the Dipper Vega, the superb star, high in the north, not far west of the meridian, and Capella will be found in the northeast, outshining its neighbors. The three stars form together an irregular triangle. But planets and stars will lose their luster when toward the latter part of the month the alpart full face of the har most moon shines in the vest moon shines in the
eastern horizon, just a eastern horizon, just a
short while after the sun set glow has disappeared and rises slowly to the zenith, putting out the light of the fainter stars.
The September moon is new on the 7th and passes through the phase of quartering on the 13th. On the 21 st it is full moon, a few hours in advance of the time the sun crosses the line, and astronomical au tumn begins. The last
quarter takes place on the 29th. The series of lunar conjunctions begins with Jupiter early on the 6th, and it is a very close meeting indeed, but the planet has been too recently in conjunction with the sun to admit of our seeing his face just at present, and so the human eye is not permitted to dwell upon what must be a beautiful picture. On the 8th Venus and the three days' old crescent are in line, but all too far apart to prove particularly attractive, although any tableau in which these two take a prominent part is well worthy our admiration. Mercury, on the 9th, is fairly close to the moon, and, as we can see this elusive planet on that night, it will be a somewhat rare spectacle, although there are more than two degrees of clear sky between the principal actors. Saturn's turn is next, on the 11th, and Uranus a few hours later the same day, but beyond a mere passing notice there is nothing to be said of these meetings. There is now quite a number of days intervening before the next meeting, which is with Neptune on the 28th, the list closing three hours later, with a meeting between the moon and the warlike planet.
Jupiter having been in conjunction with the sun about the middle of the last month, has now become a morning star, and will shortly assert himself as the most conspicuous object in the early morning sky, although just at present his whereabouts are not disclosed to the unaided human vision, owing to a too close proximity to the sun.
Venus has taken her familiar place in the western sky, where she can be seen shining among the ever chang ing sunset glow, not too brightly perhaps just at pres ent, but giving promise of better things to come and cheering us with the assurance that she has come to stay as long as 1896 remains on the calendar. She wrested the sovereignty of the evening sky from Jupiter, whom she drove entirely out of her realm, and who will not again attempt to rival her this year.
Mercury on the 9th is in conjunction with the moon, and soon after the autumn sunbeams have ceased to dart their gay delights about the western horizon we can see the planet shining for a while above the line where earth and sky seem to meet. On the 13th the planet reaches his point of greatest distance to the east ward of the sun, which is 26 degrees 43 minutes away from that body. This is the last time for this year that the Mercurial pendulum will swing to the far eastward, so those caring to have a look at the planet will have to do so very soon or give it up until after the new year arrives. On the 24th Mercury, moving to the westward, is in line with Venus on her way in the opposite direction, but at that time only the sharp eyed can readily distinguish the smaller planet. The larger one, however, will appear at first very pale, and then will grow fuller and fuller and warmer.
Saturn is also an evening star, and joins the proces sion of brilliants that majestically move toward the west. The conjunction with Luna on the 11 th is not
deserving of more than passing notice, as there are almost eight degrees of clear blue between the two. Saturn is moving with accustomed dignity toward conjunction with the sun, where he will arrive in the early part of November, and after which he will be a morning star. In size and brilliancy, the wonderful ringed planet is gradually fading, and will continue so to do until after his period of transition from evening to morning star. Neptune is in quadrature, or 90 degrees away from the sun, on the 12 th, on his way degrees away from the sun, on the $12 t h$, on his way
toward opposition, where he will be due in December.


## LAUNCH OF THE ERNEST-BAZIN ROLLER VESSEL

The island of Hawaii is the largest of the Hawaiian group, having an area of 4,216 statute square miles, an acreage of $2,500,000$, and a population exceeding 27,000 . It is situated between $20^{\circ} 30^{\prime} 19^{\prime \prime}$ north latitude. Its relative size to the entire group is five-eighths of all. Its population is about one-third that of all the islands, and probably more than that of Honolulu ard the island of Oahu. In its natural resources, it has more than that of all the other islands of the group combined, having twenty-five sugar plantations in active operation, controlling over 100,000 acres of land, of which over 40,000 are in actual cultivation for surar srowing purposes. These plantations give employment to over $10,000 \mathrm{men}$ and women, and produce an average of over 73,000 tons of sugar annually, of the average value of $\$ 3,-$ 500,000.
This sugar product is not far from one-half of the entire product of all the islands of the group. In addition to the raising and manufacture of sugar, some of the plantations have large stock and dairy interests, one, the Hutch inson Plantation Com pany, having over 3,000 head of stock ; and the Kukaian Plantation Company, which breeds and raises the best of horses, mules, jacks, cattle, sheep roats, hogs, etc., having a large herd now on its place. It also has a large dairy in connection with itsother interests, in which are 500 cows, 150 of which are milk ed daily. This plantation On the 24th Mars and Neptune are in conjunction, an has about 80 acres of coffee growing. The crop this extremely close meeting, which we are not permitted year from 40 acres is estimated at 91,530 pounds of ber to see without instrumental assistance. Neptune is to be found in 5 hours 18 minutes right ascension and 21 degrees 42 minutes north declination, in the constella tion of Taurus.
Mars is now about in quadrature with the sun, and is one of the morning stars. His size is on the increase and in December, when he is in opposition, and we have him in sight throughout the evening, he will be a most striking and pleasing object to gaze upon. Dur ing September, beyond the minor events already alluddo, Mars is not very conspicuous.
Uranus may also be included in the last portion of the emarks upon Mars, as he is quite out of the runnins for the month, and is held in the grip of the Scorpion -New York Times

## a RUBBER ERASER HOLDER.

A simple device for holding circular rubber erasers, by which the eraser may be securely and firmly held

henkel s eraser holder.
even when worn to a very small size, is represented in the engraving, and has been patented by Charles V Henkel, of No. 590 East 136th Street, New York City Fig. 1 shows the device in position when the eraser is new and of full size, and Fig. 2 when the eraser is great ly reduced in size, or nearly worn out. The holder has circular thin metal side plates in which are opposing radial slots adapted to carry a head or pin on whose other end is a serew clamping nut. The eraser has axial movement on the pin, and by moving the latter outward the center of the eraser is brought correspondingly near the edge of the side plates. The eraser may be freely turned on the pin and expose every portion of its periphery.

Accordin to the Cologne Gazette, paraffine is found to be an excellent remedy for snake poison. The paraffine oil is worked thoroushly into the wound and then allowed to stand on it in a pool or the bitten part then allowed to stand on
poulticed with paraffine.

## Recent Patent and Trade Mark Decisions.

Houston E. \& W. T. R. W. Company v. Stern (U. S. C C. A. 5th Cir.) 74 Fed. Rep. 636.

Damages for Infringement.-In action at law for in fringement of a patent the damagesrecoverable are not restricted to actual damages, but evidence may be given of sales made to other parties and license fee collected as royalty. In such case a witness cannot b permitted to give his opinion as to what would be the fair, reasonable value of the right to use the invention. Where the evidence shows only three sales made more than ten years before the infringement complained of while the device has been on the market during all the intervening time, it is not a sufficient basis to establish any market value for the patent, and hence nomina damages only can be given.

Excelsior Elevator Cord and Hatch Cover Company $\mathbf{v}$
Foote (U. S. C. C. N. Y.) 74 Fed. Rep. 772.
Hatchway Covers.-The Fraser patent No. 278,528 for a combination of a number of doors, cords, or chains a number of catches, and a connection between the catch of one door and the adjacent door, so that the closing of the latter will release the former and permit it to close, is held void as showing only mechanica skill in modifying and adapting pre-existing devices.

American Graphophone Company v. Amet (U. S. C. C
III.) 74 Fed. Rep. 789.

Graphophone.-The Bell and Taintor patent No 341,214 for the combination with a grooved tablet having a sound record formed therein of a reproducer having a rubbing style loosely mounted so as to be laterally movable to adjust itself to the groove, is not void for want of invention.
Partial Infringement.-The above claim is infringed by a device having a loose joint that enables the style to follow in the groove of the record, which is used only with a sound record made by the patentee, because in the use of such device all the elements of the patented combination are employed and therefore the independ ent sale of such reproducer will be prevented.

Ex Parte Lunken (Com. Dec.) 76 O. G. 885.
Mechanical Patent no Bar to Design Patent.-A design patent may be procured on a thing that has been the subject of a mechanical patent, as the two patents relate to different features of a thing which could not be claimed in a single patent.
Utility of a Design.-The word "useful" in the stat ute relating to designs has reference to mechanical rather than purely æsthetic features in designs relating to machinery.

