

of a current of air, so this speck of liquid fire is made to turn under the force exerted by the flow of the condensing gas. As we gaze in silent awe this little nucleus expands into a huge ball—into an immense globe! Millions of ages elapse, but this fiery globe continues its tireless revolutions. Like a sponge it has taken up the nebulous matter, and appropriated it as a part of itself, until it has expanded and fills all the space within the orbit of the most distant planet belonging to our present solar system. Its diameter is more than six thousand million of miles. A great force holds it in a solid mass, else the surface would fly off by force of the revolution on its imaginary axis. But the central attraction has its limit, and when that is attained, the accretion continuing, portions of its surface must be thrown off, like balls of mud from the wheels of a coach when rapidly driven.

Behold! even while we are watching, the limit of the central force has been reached and passed. See that huge mass of liquid fire as it is hurled into space! Mark how quickly it takes a globular form, polarity and revolution upon an imaginary axis, like its parent. We are catching the first glimpses of heredity. Neptune, the first born from our sun, wheels into his orbit and begins his planetary life. But as the offspring in turn becomes a parent, so Neptune threw off a portion of himself and moons were born to him. A child and grandchildren now trace their ancestry to our sun. But others are being born; we see Uranus, Saturn and Jupiter as they fly off and join the celestial train.

A wonderful catastrophe rivets our attention on the birth of the next (and fifth) planet. By the operation of some occult force, instead of wrapping its fiery garments into globular form, and taking its place in the train of worlds, like a well-bred planet, it bursts into hundreds of fragments, each becoming a little world, named by mortals of the present time "planetoids" (like planets, the Greek suffix, *oid*, meaning "like.") Fixing our gaze once more upon the parent plant, we behold the birth of Mars, of our own earth, of Venus and of Mercury.

As everything that our earth evolves must return to it again, so it seems, from the analogies in Nature, that the destiny of all the planets is to return to the sun, when they have accomplished the mission for which Infinite Intelligence called them into existence.

W. H. CHANEY.

THE Terminus Hotel at Tacoma, J. W. Woodard, proprietor, stands near the depot and car shops. That city has long needed adequate hotel accommodations, and these Mr. Woodard is now providing. The convenience of its location and the superior accommodations afforded render the Terminus Hotel a great favorite with the traveling public.

THE live real estate firm of Bowen & Daniels, at Tacoma, have on their list choice business and residence property in that city, and desirable farm and timber lands and manufacturing sites. They invite correspondence.

THE COLORS OF BUOYS.

WHEN you enter any harbor in the world, said a pilot to a *Sun* reporter, where the channel is marked by buoys, you will find that those on your right as you pass in are painted red and those on your left black. If you should see one painted in red and black horizontal bands the ship should run as close to it as possible, because that indicates the center of a narrow channel. Buoys with red and black vertical stripes always mark the ends of spits and the outer and inner ends of extensive reefs, where there is a channel on each side. When red and black checkers are painted on a buoy it marks either a rock in the open sea or an obstruction in the harbor of small extent, with a channel all around. If there are two such obstructions and a channel between them, the buoy on the right of you will have red and white checkers, and the one on your left will have black and white checkers. When a wreck obstructs the channel a green buoy will be placed on the sea side of the wreck, with the word "wreck" plainly painted on it in white letters, provided there is a clear channel all around it; otherwise, an even number will be painted in white above the word "wreck" when the buoy is on the right side of the channel, and an odd number if the buoy is on the left.

NO WONDER!

HOW very few of the thousands who complain of "hard times" realize that the chief causes of our business and financial distress consist in our toleration, as a people, of indiscreet and expensive habits. Statistics show that we pay for articles not only altogether unnecessary for our comfort, but positively injurious to health of body and mind, hundreds of millions of dollars; indeed, many times the absolute cost of proper food and clothing. Let us look at some of the items: Cost of tobacco and cigars during a year, \$610,000,000; importations of liquor, \$50,000,000; support of grog shops, \$1,500,000,000; cost of supporting criminals, made such by rum, \$12,000,000; fees in prosecuting the cases of such criminals, \$35,000,000; cost of keeping dogs, \$70,000,000. A people that can spend money in this profuse fashion ought not to complain of "hard times!" But we could enumerate a score of other ways in which money is squandered, which would double the above grand aggregate.

PREPARING GLASSWARE.—It is ascertained from experience that it is always best to boil lamp chimneys and chinaware and ordinary glassware before using them. The glass is greatly toughened by the process, and the boiling of chinaware prevents it from subsequent cracking. Lamp chimneys and shades which are stained may be thoroughly cleaned by boiling them in soda water, using ordinary washing soda. The glass or china should be put in enough cold water to cover the articles, with a cloth or board in the bottom, and brought gently to the boiling point, when it may boil from one to six hours, according to convenience.