

deep enough under water to strike below the armored belt. In the pointed nose of the weapon is a plunger which is driven home upon contact, igniting the priming, which in turn ignites and explodes the 150 pounds of wet gun cotton. The torpedo is prevented from diving or rising to the surface during its run by the action of a horizontal rudder which is controlled by the pressure of the column of water above it. If the torpedo attempts to leave the depth to which it is adjusted, this horizontal rudder is acted upon by the varying pressure and the torpedo is brought back to its proper depth. The cost of a Whitehead torpedo is about \$3,000.

THE LORDS AND THE MOON. When Mr. Richard Harding Davis is in London, and can spare the time, he visits the terraces of the Houses of Parliament, where he drinks tea with lords, who stop legislating for that purpose. It was while thus engaged that he observed the moon rising behind St. Paul's, as is recorded in the book which he afterward wrote upon the subject. Now St. Paul's lies northeast from the terraces of the Houses of Parliament.

OLD POST ROADS. Major Lewis Downing has recently had pleasant correspondence with Mr. George F. Ives, of Danbury, Conn., a well-known collector of Americana. Mr. Ives is just at present particularly interested in all that relates to the old days of stage coaching in New England, and it is with regard to the history of the Concord coaches that he has been communicating with Major Downing, who, as head of the Abbot-Downing Company, probably knows more about those vehicles than any one else alive.

Major Downing sent Mr. Ives some photographs of old coaches, and in return received a photograph which is such a curiosity as to be well worth extended description. The original of this photograph was an old handkerchief, printed in 1815 by R. Gillespie, at "Anderston Printfield, near Glasgow." Around the edge is a very neat and pretty floral border, with the arms of the United States, the front and reverse of the dollar of 1815, a quartette of ships of war, and portraits of Washington, Adams, Jefferson, and "Maddison" intertwined.

Its title is "A Geographical View of All the Post Towns in the United States of America and Their Distance from Each Other According to the Establishment of the Postmaster General in the Year 1815." By an ingenious arrangement of the towns on the main coast line and those on the cross post roads, the distance from one of these posts to any other could easily be ascertained. The "main line of post towns" extended "from Passamaquoddy in the District of Maine to Sunbury in the State of Georgia." Portsmouth was the only

New Hampshire town on this main line, having York, Wells, Biddeford, and Portland on the one side and "Newbury Port," Ipswich, Salem, and Boston on the other.

The first of the cross post roads given on the map led from Portsmouth to Exeter, 15 miles, to Concord, 40 miles more, to Hanover, 60 miles more, making a total of 115 miles from Portsmouth to Hanover. Other New England cross roads were from Salem to Gloucester, Boston to Nantucket, Boston to Barnstable, Boston to Newport, Newport to "Newhaven," Boston to Providence, Springfield to Hanover, Boston to Hanover, Boston to Albany, Boston to Quebec, and Northampton to Williamstown.

Springfield to Hanover was by way of Northampton, Deerfield, Greenfield, "Brattleburgh," Westminster, Charlestown, Windsor, and Hanover. The Boston post for Hanover went by way of Concord, Mass., Groton, Ashburnham, Newmarlboro, Walpole, Charlestown, Cornish, and Lebanon. The distance from Springfield to Hanover was 126 miles and from Boston to Hanover 147 miles.

The object in publishing such a table as this was to make it possible for the people to compute easily and with a handy helper what the cost of postage on any letters they might chance to write would be. Nowadays we stick a two-cent stamp in the corner of an envelope, and post the letter without further thought if it is going anywhere in this broad land, to Tacoma, to El Paso, or any other distance, however much greater than the extreme limit of 1815, Passamaquoddy to Sunbury.

But in that year, 82 years ago, the postoffice department was run on other lines. The following "rates of postage" are given on the old handkerchief: "Single Letter conveyed by land for any distance not exceeding 10 Miles, 6 cents.

Over 10, not exceeding 60 miles,	8 cents.
" 60 "	" 100 " 10 "
" 100 "	" 150 " 12 "
" 150 "	" 200 " 15 "
" 200 "	" 250 " 17 "
" 250 "	" 350 " 20 "
" 350 "	" 450 " 22 "
For 450	25 "

Double letters are charged double and triple letters, triple of these rates. A packet weighing one ounce avoirdupois at the rate of four single letters.

"A table exhibiting the lengths and breadths of the several United States of America &c.." includes as states Vermont, "Newhampshire," "Main," Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, "North West Territory," Virginia, Kentucky, North Carolina, Tennessee, South Carolina, and Georgia. New Hampshire is given as 168 miles long, 55 miles broad, and including 9,500 square miles in five

counties. Under population it is bracketed with "Main," and the sum total of souls in both is given at 349,000.

There are many other things of great interest to be noticed in this photographic reproduction of an old handkerchief, and the longer it is studied the more its quaintness and ingenuity are appreciated. Its owner has had but two photographs finished from the plate, with the intention of keeping the reproductions rare. Major Downing is certainly fortunate in having received one of them as a present.—Concord, N. H., Monitor.

A GLORIFICATION OF STAGE-DRIVERS. In first place, there is magic in the calling of a stage-driver. Everybody knows and aspires to know the stage-driver; everybody is known by, and is proud to be known by the stage-driver. The little boys remember it a month, if the stage-driver speaks to them. There is a particular satisfaction to be able to distinguish among drivers and say it was Winkle, or it was Hines, or it was Mitchell. Of all the people on the earth, he is the one who rolls by in a gilded coach; he is the one who sweeps it high and dry over the world; he is the one who rides through his immense estate with the most lordly and consequential air, and all the rest of us seem to be but poor tenants and gaping boors. It is something to speak to a stage-driver; it is a great thing to be able to joke with him.

It is a sign of a great man to be recognized by the stage-driver. To be, perchance, known by one who knows nobody is nothing; to be known, to be pointed out, to have your name whispered in a by-stander's ear by one who knows everybody, affects you as if Omniscience were speaking about you. The stage-driver differs from the steamboat captain in that the latter is not seen to be so immediately connected with his craft as the former. We meet the captain at the breakfast table; he is nobody; he is no more than we; we can eat as well as he can. But who dare touch the stage-driver? Who dare swing his whip?

How rapidly and securely he drives down one hill and up the next—and that with fifteen passengers and a half ton of baggage! Then how majestically he rounds to at the door of the tavern! What delicate pomp in the movement of the four handsome horses! In what style the cloud of dust, that has served as an outrider all the way, passes off when the coach stops? How the villagers—the blacksmith, the shoemaker, the thoughtful politician, and the boozy loafers that fill the stoop—grin and stare and make their criticisms!

How he flings the reins and the tired horses to the stable-boy, who presently returns with a splendid relay! How he accepts these from the boy, with that sort of air with which a king might be