

table. Into its upper face is let, perpendicularly, a straight tube, which rises to a height of 27 inches above the face, the internal cross-section of the tube being one square inch. Vessel and tube are filled with water. Find the pressure on the bottom of the vessel, also the pressure on the table due to the water. (A cubic foot of water weighs 1000 ounces.)

6. Describe the barometer. Explain the principle of its action.

What height of atmosphere, weighing 1.2916 oz. to the cubic foot, would balance a 30-inch column in a mercury barometer, the specific gravity of mercury being 13.596, (water = 1.)

LATIN.

A.—VIRGIL, *Æneid*, B. II.

Translate into English :

Fando aliquod, si forte tuas pervenit ad aures

Belidæ nomen Palamedis, et incluta famâ Gloria, quem falsâ sub proditiōe Pclasgi Insontem, infando indicio, quia bella vebat,

Demisere neci, nunc cassum lumine lugent: Illi me comitem, et consanguinitate propinquum,

Pauper in arma pater primis huc misit ab annis.

Dum stabat regno incolumis, regumque vigeat

Consiliis, et nos aliquod nomenque decusque

Gessimus. Invidiâ postquam pellacis Ulixi (Haud ignota loquor) superis concessit ab oris,

Afflictus vitam in tenebris luctuque trahabam,

Et casum insontis mecum indignabar amici. Nec tacui demens, et me, fors si qua *tulisset*,

Si patrias unquam *remedissem* victor ad Argos,

Promisi ultorem, et verbis odia aspera movi. Hinc mihi prima mali labe; hinc semper Ulixes

Criminibus terrere novis; hinc spargere voces

In vulgum ambiguas; et querere conscius arma.

Nec *requirit* enim, donec Calchante ministro

Sed quid ego hæc autem nequicquam ingrata revolvō?

Quidve moror? Si omnes uno ordine habetis Achivos.

Idque audire sat est, jamdudum sumite pœnas;

Hoc Ithacus velit, et magno *mercentur* Atridæ.

zv. 81-104.

1. Parse the italicized words, giving the principal parts.

2. Explain the case of *ultorem* (v. 96), the mood of *spargere* (v. 98), the form *qua* (v. 94) the case of *neci* (v. 85), the figure at *ministro*.

3. 'Idque audire sat est.' What does *ia* mean here?

4. Scan vv. 102 to 104.

5. State the exact position of Argos and Ithaca.

6. Belidæ—What peculiarity?

B.—VIRGIL, *Eclogues*.

Translate into English :

I.

MEL.—Et quæ tanta fuit Rômam tibi caussa videndi?

TIT.—Libertas; quæ, sera, tamen respexit inertem,

Candidior postquam tondenti barba cadebat;

Respexit tamen, et longo post tempore venit,

Postquam nos Amaryllis habet, Galatea reliquit.

Namque, fatebor enim, dum me Galatea tenebat,

Nec spes libertatis erat, nec cura peculi.

Quamvis multa meis *exiret* victima septis, Pinguis et ingræte premeretur caseus urbi,

Non unquam gravis ære domum mihi dextra redibat.

I. 27-36.

Pergite, Pierides. Chromis et Mnasyllus in antru