Vol. II.

Lunis

and

Venus

Vol 11th

London 2 Nov

1790

~~1096~~. What height of a fixed engine will produce a maximum?

Mather

~~1097~~. In what proportion does the resistance of the air increase in proportion to the height?

Mather

~~1098~~. What is the cause of a blind man's continued motion?

Mitchell

~~1099~~. May not the cause of a squint be owing to the limits of distinct vision being shorter in the obliquer eye and the eye turning to one side so that by shortening the distance it may reach the water —

Mitchell

1100.

~~1900~~ Does not Boscowitz Theory lead to this that Matter motion is inherent in matter? —

Mechanics

~~1901~~ What becomes of all the inflammable air which escapes from bodies? —

Chemistry

~~1902~~ By what experiments can it be proved that the rays of light do not heat the atmosphere? —

Optics

~~1903~~ Suppose the rays of light negatively hot should not there be a greater degree of cold at the surface ~~that~~ day break than before

Optics

and

and on the lower region of a mountain when the sun begins to shine on the top also in the shade near the same light?

~~Top~~ 4. Air is affected that a water-sheet moves with greater velocity during the night than during the day If so give the cause —

Mechanical

~~Top~~ 5. The air rushes up the chimney during the day and down during night in a room which has had no fire in it — Both French Circulation in nature

Opinion of

~~Top~~ 6. With the bat of a watch the affected in

Mech

different that ones at the
Pole if a pendulum? —
— will the watch go slower
at the Equator? —

Can the sudden
fall of the thermometer
be accounted for from
evaporation? —

N. Hudson

A German Chemist
has discovered that Terra
ponderosa, Chalk, Flint
Borax Fluatites are
all metals — Cooks Journal —
(Mr Howard found
to be a mistake

~~1[illegible]~~ 9. In launching a ship of the line about $\frac{1}{4}$ th $\frac{3}{8}$ inch for feet is allowed for delivery —

Navy office

The cradle $\frac{1}{2}$ greatest breadth of the ship.

— Double screw at the head

— Blocks all shunk out except the end ones —

~~1[illegible]~~ 10. Effectual deals fourth of the lower tier 35 by 3 feet

Ditto

~~1911.~~ To clean brass that is lacquered – rub it with Linseed oil on flannel or a soft rag.

Lahai:

1912. Does the water of the sea decrease? Does it not appear to desert the shore? Are not the sand banks thrown out on the shore be brought from below? Or are they carried down the rivers? The water taken up is vegetables and other products of science all returns to the sea again —

N. Gillivray

1913. In the ague it is
said that the bottoms
of the nails turn black,
before the fit —

~~1914~~ Suppose the rays
of the sun are negative,
hot and cold the lower
part of the atmosphere
when they begin to shine
on the upper, may not
the sudden cold below be occa-
sioned by the rays touching
the earth at some distance
when they illuminate the
upper part of the atmosph
they are a tangent to a
point of the earth concave

N. Thulbourn

1915. Why is the paint behind a picture frame or behind a chair discoloured? Is it owing to want of a free circulation of air or to want of light? Light bleaches vegetable substances white, does it produce the same on mineral substances? or is there a tendency to reduction of the oxide of lead or white lead by the rays of the sun which are phlogiston or their absence

Miscellaneous

~~1916~~. In founding a metal, care must be taken to let the air escape freely from the mould, to prevent some getting into the mould — An improv.

Metallurgy

is to let the metal in at the bottom of the mould

~~1917~~. Metal may be cast without making the mould broader above

Ditto

in which case — by making it in halves of a square or rectangular box —

~~1918~~. It is asserted that metals poured when heated much sooner set than when

Ditto

Red heated! —

~~1418~~. If any Phlogiste substance fall into the pot of melted Gold it renders it brittle and no longer malleable restored by corrosive sublimate —

Ditto

~~1419~~. When Gold is held over the surface of burning brimstone it grows brittle this it is said happens only when the Gold is not pure —

Ditto

~~1420~~. Silver tarnishes in the air on account of the Sulphur it contains —

#
1921. Melted iron is spe-
cifically heavier than
cold iron, because a cold
bar swims in a melted
Ditto pot. Qeuis is this the
case with any other
metals?

~~1922~~. May not prepaing
Gold by hardening it
Ditto be the best method
of making gold fountain
springs? —

~~1923~~. Some suppose that
the difference between
Ditto hard and soft iron con-
sists in the former being
deprived of the phlogiston

~~1924~~. A mild made of sand better than Marble of Paris, as escapes better in the form

Ditto

~~1925~~. # What is the reason # that water thrown on melted lead produces such a great explosion

Ditto

~~1926~~. Suppose a vessel of cold water and one of warm equally exposed to the air for half an hour which will freeze sooner?

Experiment

1927.

Q 23. Pour boiling water on paper, when stirred just in a quantity of glue and whiting, this makes the substance for the ornaments on chimney pieces &c

Manufacture

Q 24. Steel may be made in small quantities in the following manner Burn a quantity of bones with the ashes with wine, put in a crucible covered with the sand. — Quere is it not the phosphorus of the animal substance

Metallurgy

that converts the iron
into steel?

~~Q 25.~~ That it is not Phlo-
giston that makes
steel will be obvious
from the following
experiments —

Method 4

1 In testing the bone
ashes it covered with sand
the crucible surrounded
with sand and yet the
iron ring is converted
into steel, here no
Phlogiston matter
comes in contact

2 In soldering the nuts
of metal buttons the
binding wire which
is in contact with the
steel button is converted
into steel, on the other
side it is still iron

3 wrap a small iron
wire round a cylinder
of steel before it is heated
it will be converted

4 Hence it appears that
steel has the property
of making steel like
a magnetic bar, and
take steel too any
number in succession

~~1926~~ It may be said
that the lime or her
shell retains some Phlogi-
but this cannot be the
case, because the lead in
the testing process would
not be undersized as above

Ditto

~~1927~~ Modern Mortar
not equal to the ancient
has the ancient made
of different lime, sand
or, had the ancients a
different mode of tem-
pering it? — Prof.
Duncan —

Fine ash

~~1928~~ By what means
Do spiders walk inverts
— Glutinous substance
on their feet — Claws —
— Do the wings assist
as in swimming?
— Can a fly enlarge its
body by drawing in
air — will this make
any body specifically
lighter in air? —

Miscellaneous

~~1929~~. What was the object in fluting ancient columns? was it to support the spears? —

From Cuts

~~1930~~ In what respects does case hardening differ from steel process? are they the same but differ only in time — when the case hardening process is continued as long as the other, the result is the same —

Mechanics

~~1931~~ 1. Cement for walls made of poor French chalk dried in an oven and finely powdered, this with lime and fine sand makes a very durable cement — This proved a chemical answer for knowing in the surface of metal to prevent scores by friction the scores —

Iron Walls

~~1932~~ 2. Iron is better when not more porous by being wrought upon with rivets, this shows that Phosphorus is concerned — for iron from the colour of the Phosphorus flame is manifest. — This probably constitutes the difference between cast and wrought iron and weight iron and steel —

Metallurgy

~~1933~~. What is Plumbago? what is fine charcoal? —

Chemistry

~~1934~~ Cannot a bridge for the saltness of the sea 1. washes salt from the sand by rain 2. Salt works

Mr. Stanley

3. Originally Salt —

~~1935~~. ~~Salt~~ Sea water not saturated with Salt = $\frac{1}{33}$ when quiet, whence brine = $\frac{1}{4}$ —

Dr. Murray

~~1936~~. Is there any sea fish that could not exist in fresh water? —

Dr. Murray

~~1937~~ Salt Peter is made in some parts of the east Indies by burning a long Kind of Grass on rising grounds, the ashes during the rainy season is washed down into the low grounds, and washed with a particular soil produces

Manufactures

the mike — ~~for it~~

~~1959~~ In spain the new walls of old houses made with animal matter and wood ashes are all pulverized together —

Office

~~1949.~~ What is the reason that a vessel of water placed in a room new painted with white lead is rendered noxious? the water is also said to diminish the smell. —

Miscellaneous

~~1940.~~ What effect has Electricity in Dephlogisticated air?

Elec.

~~1.~~ 1. Without fire air Electricity probably would not exist —

Electricity

~~2.~~ 2. Philosophers say mercury in an empty glass bottle, leave a small quantity of fire air, this will probably answer the effect —

Mercury

~~3.~~ 3. Will a bit of meat when warm conduct electricity?

Elect.

~~4.~~ 4. Now pray does the colour affect the conducting power of bodies both with regard to common fire and Elect.?

Colour

1945. Would not a Lecture on Mechanics be a useful addition to the Society of arts? —

Mechanics

1946.

1950. Tables for the
Chemical repository
— Sympathetic Inks
— Phosphorus prepared
— Tests for Waters —
— Experiments on water
— Acids in all their different forms —
Alkalies ditto —
— Metallic ores — calces —
— Tests for Manures
— Tests for different soils
— Inks for marking Linen —
— Letter cement —
— Antimoniate
— Method to render Salt Butter fresh —
— Tests for the adulteration of wine —

Articles for the Chemical
repository — continued
— Vegetable solutions
for colours
— Neutral Salts —
— Oils for Sale —
— Philosophers Lamp —
— candle
— Varnishes —
— Cements —
— Lutes —
— Lime water
— Bolonian Phosphorus
— Pyrophorus —
— Arbor Diannæ
— Mechanical recreations
— Arbor Mortis —
— Mineral Camelion
— bottles turned to spring
— Pulse glasses
— Water Hammers

— Chemical Repository
— Crucibles — Boilers — Evaporating ditto — Glass drops
— Glass feather —
+ Muriated lime i.e. lime dissolved in the marine acid when evaporated and mixed with dist. water and stirred gently becomes solid
— Respirable for letting out claims of all sorts —

Chemical Repository
continued

apparatus

— Portable furnaces
— Crucibles common — of
Tobacco pipe clay —
— Tongs &c —
— Mortars — chemical
apparatus —
— Specimens of fossils
— Spar — Stalactites
Lavas —
— Doctor Black's iron fur-
nace lined with a com-
position of clay and char-
coal —

X

1951 Trouble with a
acetated lead – write
– with this on one side
of a paper, come with
green write with the
remaining ink on the
same part of the paper
dip a little cotton in
the sympathetic ink
and paper the writing
will be erased & on the
first will appear

Chemistry

Chemistry

~~1953~~ 2. Lime water added to an infusion of red cabbage makes it a better test —

Experiment

~~1953~~ 3. A Flint lead on the hand or any thing soft is easily broken, but on any thing hard will keep better —

~~1954~~ Test paper — reddening turn sol. —

Chemistry

To preserve an infusion of red cabb: boil the cabb: when well dried in a small quantity of water, add a small quantity of Oil and precipitate it with Chalk, the infusion may be kept a long

~~1455.~~ A bit of litmus paper held over Vol. alkali (sal ammon.) instantly changes its colour — & immersed in water until that the smallest quantity of alkali is put, it changes more than when held over the bottle —

Chemistry

~~1456.~~ Does not the sugar in the syrup of Viol. prevent its effect as a test?

Do.

~~1457.~~ Does Higgins's introduces inflam.d air into the retort in infusing phosphorus to prevent the water from the receiver flowing in the retort.

Do.

~~1950~~ Sulphur is not in
" held by respirable air (
respirable Sulphur) dis-
Ohm covered by the Phlogisticated
Vol: air, or sugar of lead

~~1959~~ Two bodies shall not
~~1964~~ smoke by themselves and
Ditto yet when near each other
do. Vol: alkali and
Vol: acetous acid —

~~1960~~ ~~Salt~~ Calx of copper from
a solution in the Nit:
and a ~~precipitate~~ vapourous
Ditto amount better than the
solution for growing lin

~~1961~~ Mineral constituents
warm water carbonous
Ditto per volume —

~~196~~ 2. Potash candles
(or tallow) with Phosphorus produces an air which takes fire when exposed to the atmosphere explodes when mixed with pure air —
— carries fire the inflammable air contained in the Vol. alk. —

Phosphorus

~~196~~ 3. Precipitate fer. mixed
Sal: amm — into a pounds of horse Vol: alk: put Vitr: and form Vitriolated ammoniac — add sea salt, the Marine acid enters with the Vol: alk: = sal: amm: and the Vitr: a: with the fixed alk: forms Glauber salt —

Phosphorus

These are despatched by

Chinese 1964. From the article 1957
it appears that so cold may
be formed of air! —

~~1965~~. A fine specimen of Zach
chew will form a fine white

X

~~1910~~ 4. Would not air in
Jarrow answer best
for my experiments? —

Dello

~~1910~~ 5. Is considered in
fixed air not for its
noxious quality but for
the absence of pure air —
Inflam. &c. &c. Bells
from its noxious quality
Min from the appearance
of the animal dying
Coles M — 8

Chemistry

~~1910~~ 6. Pulse an Pulsehow
a good test of white
paint — Also infusion
of Galls

Dello

~~1910~~ 7. In the experiments
on colour with the infu
sion of Galls, the colour

Dello

seems to depend on the
Salts & not on the acids
or Alkalis employed —

~~1969~~ 8. Terra ponderosa
is presented as a medi-
cine in what deserved
Doctor Crawford makes of
use of it

Ditto

1969. What is the best
method of Dissolving
Glass? Such a propor-
tion of Alkali may
be added as will make
the Glass dissolve in
water — A permanent
white may probably be

Ditto

made of this. ——

X
1970. Model of a burning mountain — Drawings of Strata — Figures of animals. Plants —
— Specimens of fossils
— Sea weed — Porter siccus
— Model of the Guanito Cave
— Tin funnel for fixed air
— Brass for Electrical Exp.
— Plate for charging —
— Swans for Electricity
— Lock of Cotton Jeils —

~~1977~~ Muriated Lime

Chemistry

attracts more moisture from the air than any other alkali, more convenient for drying air than Vitriolic acid —

~~1978~~. If the candle a Philosophica he had in the mouth of a bell for it gave a humming sound —

Chemistry

Mr. Coing and Hector
145 Lad. hatt thus —

24 20 0