

12 Vol. 12

25 June by 19 -

¹²⁰
Date 14 July - A. G. 20

~~27 Sept -~~ paid

with

To A. G. 30

~~Due 2 Nov -~~ paid

Swiveling Engine

To A. G. 13 7 1/2

Come to Jan 1

W. Marshall

22 August 1791

Luriers

and

Ninth

Vol. 12

London 6th Street

1791

1973. Quinzhan says
the Romans did not
use trenches in their
approaches, but at least,
above ground.

Mans

1974. Don the vibra-
tion of the spear - is it
the double more perfect
by the sawing? Or is it
not, or by the circular
motion impressed on it
at point?

Don

1975. Caesar lengthens his
first line by extending
the second? not exactly
understood - This in Africa.

Don

~~1976.~~ The common du
of iron that a calor shell
produces a maximum when
the shell has $\frac{1}{2}$ vol. not
true, it should be $\frac{1}{2}$ —
M. K. - 4

~~1977.~~ Instead of calor M.K.
has put two tubes to the
stem of his steam boat.
quite how in the former
calculations? —

~~1978.~~ The water in the
two tubes acts like a
pneumatic act on two
two springs, and come
quently, but for the first
one stroke should come at
two on for two" M. K. —

1979 ~~Vanessa Johnson~~
~~Ship Repair Shopelling~~
~~Spring a Sup - Con -~~

1980. Will the same
Exp. says collected by a Com.
or Minor melt 9/10?

1901. Eight oxen in a
mill will bruise 12
Wt. of sugar 9 weeks
in the week = 14 Cts
each - 1 Oct work
two hours at a spell
5 sets employed in
a mill -

Manufacturer

X
~~1900~~ 1902. The Juice
is received in a large
wooden vessel or ce-
lino civer, from thence
into the grand coffee
pot a slow fire
raised to the boiling
point - steam taken
off - fire again more
steam, then when
steam thrown into
the rest by ladles -
into paper cups
- three - At a medium
the process may take

1½ lbm of that etc
10 ~~lb~~ M.D. may be
made. J. weak — This
may be done by one
pint — For ^{to 2400} At
c. medii 100 Gall
of liquor any powder
one lb. of the ^{to 107}
cut of sugar —

The Rum is distilled
principally from the
shavings — To these
are added a certain
quantity of Metapha
and Powder which is the
the essence of the fruit

Distillation — Now use
all :: by P. Cut —
Skimmings 7 P. Cut
Molasses 1
This makes the 2 parts
of P. Cut — Remainder
for Market run for
30 to 40 P. Cut —
to this add water —
— Liquor properly mixed
will be ready for the
still in 9 Days —

~~1903~~. The Italian Language
is more perfect than
the English and French
leaving neither guttural
nor Nasal. Its syllables
are all perfect, beginning
with a consonant and
ending with a vowel —

Substantives

1904 A French verb is
found. endeavor to
prove that the Ablative
is the radical of the Noun
and the infinitive that
of the Verb —

Verbs

1905: The nouns and verbs
which are irregularly
compared and conjugated are

Verbs

The most common and used
by the vulgar, the words
at present are, degrees of refine-
ment are always regular -

~~1906~~. A Green house in
the form of a circle or
square improvement -
would not different colored
glass be also an improve-

~~1907~~. What is it in south
bends the poles, that
enable a blind man to
distinguish one instru-
ment from another?

Sounds

A note on a violin
unison with one on
a flute are easily distin-
guished from each other
without seeing the instrument

~~1788.~~ Learn a method
Esper. to prevent a carriage
coming down on the feet
of the horse -

~~1789.~~ - To prevent the dust
Dust getting into the carriage
and at the same time
admit a sufficient quantity
of fresh air -

~~1790.~~ An oil to burn
Esper. without injuring the air
of a bed chamber. -

~~1791.~~ - Chemical chests

~~1792.~~ Blue Dye for horses
Chem. from the hands by Stuber
how a little more sand

1993. Colours, (top may
be added to the fire works
by inflammable air.

Expim

A comet shown by inflam-

air - A meteor through

a glass tube - 47 Prop

1st of Euclid -

Pandora's box - Sortes

Aindorance - Ancient

Monglyphic - Δ

Inscrip writing - no 19

1994. The Electric stone
from Brazill, like a
white pe stone

N. 911/10

1995. A simple appa-
ratus for impregnating
with fixed air

1996. To clean Marble
discoloured with smoke

Exp. 10

- 1 Quart of the strongest
soap lye
- 1 Lit Oxid ashes
- 1 Pint Whiting

Mix with a Pint or two
lay some on the Marble
letting it lay 3 or 4 weeks
washing it every day with
the mixture - Do not wash
it - soap lye being corrosive

~~1771~~
Minerals

Agriculture

~~1779~~

N. Military

Trunks lined
with Lincolnton paper
out the moisture

~~1778~~. A large vessel of
water placed in the
center of a room by
dabs in a grain house
by capillary attraction
dry water the whole

It seems an objection
^{to} against the opinion that
coal is a vegetable sub-
stance, that the shale
is so uniform in thick-
ness - May not coal
be a substance origina

7000. Immediately after a
Therm clap of thunder it rains
more violently, may not
be rain. The puffant and pure
air of the atmosphere is set
on fire by God? and con-
verted into water —

7001. Equal parts Sal. am:
and Nitre, 3 ounces of this
Therm to 4 of water with salt
the Thermometer 36° below
that of the water made use
of.

7002. Would not a tube
Expul filled with cotton fluff
keep the dust from the air
when passing into a
carriage? —

~~2003~~ The juice of the
Maple tree in North
America produces
sugar equal to any
from the cane —
sufficient to supply
all Europe —
The juice is obtained
without destroying
the tree —

~~2004~~ I am would not it
be worth while to transplant
the North American Maple
into this country for the
purpose of producing sugar?

Agave
W. M. W. W.

Q. M. W.

~~2005~~ Blighted corn which
is effected by an Attack
or resolution of the sub-
stance of the grain, is com-
posed of multitudes of
small organic substance
resembling cells which
when infused in water
can as water shows
begin to "recede" and have
a "progressive motion"
- When dry they cease
renew, on the addition
of water, this process
and even years, take
the cells in part -
- These last have no
other origin than the
union of the organic por-

Agaricellum

teles of the most important
parts of the grain - Now
are the first cells produced
certainly not by other cells
but tho' not propagated
themselves they soon
beget others - By cutting
with a lancet we discover
smaller cells springing
from the larger -

- The cells from Potatoes
corn are a species of
machine which begins
to act when it is wet
Hydrolic Engine -

200 S. Since the Romans

(discovered so much me-
chanical knowledge &
ingenuity in their Ma-
chines, and since they
had their carriage -

wheels not exceeding
2½ feet is not this
a presumption that
they were right? —

— Should this fashion
become general what
a saving would there
not be in iron and
timber through the
kingdom? —

Mechanics

Miscellaneous

2007. The settlement in
Matamoras Bay could not
be supported in time of
war on account of the
great distance, would
not Hudson's Bay be
preferable? - Nelson's
river navigable for
some hundred of miles
- Convicts might be em-
ployed in making roads
to facilitate the com-
munication with Canada
2008

2008. The sudden melting
of the ice islands
in the Northern seas
occasional cold

N. P. M. S.

26
B...

progen

2009. Are there not some
places on the Globe where
cold is continually existing
and others where it is
decreasing? — In the Days
of Caesar the Rein Deer which
at present cannot exist
south of the Baltic was
found in the Rhenishian
forest in Germany —

N. History

— The Barbarians in their
invasions into the Roman
Empire carried their Armies
heavy waggons. In the
Danube, Rhine and other
rivers during the winter
which are now at present
so much frozen

When Virginia was first
peopled from Europe the
snow used to lay 3 or 4
months, now seldom so
many days.

At Nootka sound the
weather is mild at Lu-
bradore on the same part
very cold. - Also at P. com-
shatka very cold -

~~2070~~ The temperature of
the countries round Hud-
son's Bay will be much
improved by cultura-
tion - The Lake itself
will probably contri-
bute to this -

Ordo

2011. In the Interior and
western parts of North
America the climate is
mild - Round Hudson's
bay during the breaking
up of the ice the weather
is very cold -

Dr Mc

2012. Capt. Cook informs
us that during the
months of March and
April when he was
at Nootka sound the
thermometer never fell
below 42° during the night
and frequently rose to
60° in the day. The grass

Dr Mc

in many places one foot
in length. This more
complete than in France
in England at the same
Season —

^X
2013. The transportation
of convicts to Botany Bay
through Hudsons Bay
more safe during war
and ~~less~~ less expensive
during peace than in
the usual way —

20th. What is the cause
of a red sky in the
morn^g or evening and
how is it connected with
the weather

Meredith

N. G. M. 1809

2015. Subjects for
a course of Science
Direct: —

- Geography
- Astronomy
- Natural History
- — Philosophy
- Chemistry
- Mathematics
- Logic
- Metaphysics
- Natural History
- Painting
- Sculpture
- Music
- Poetry
- Grammar
- Philology

- Government -
- General Politics
- Trade and Commerce
- Money - Standard -
- Agriculture -
- Manufactures
- Navigation -
- Surveying -
- Gauging -
- Guilding -
-

~~2016.~~ It is asserted by
some painters that
objects are fore shortened
by the Camera obscura
and the colours confused
by the prismatic rays
Give the cause of the
fore shortening? —

Geom. Optics

— The picture is said to
be less than it ought to
be :: focal distance &c
— as 90: 100 —

~~2017.~~ A communication lately
taken up between
St. Louis, and between
the latter and the
ocean by Cook's river
is highly probable.

Geography

2018. The boundary that
water has to preserve
the same temperature
with ^{under} the lands
bordering on it more
cold if woody, but more
mild if ^{shrub} cultivated -

2019. A system of lectures
for Sunday - to begin
with Geography -

Chrom. why -

~~2020~~ Experiment by Capt.

Exp. in Muffs to create
the Temp: of the sea
at 700 fath. Depth. The
ther at 26° - Page 28
compare with Page 142, 174

2021. In the form of
How came the sea to
run so fluid? -

N. Hudson - How are ice mountains
formed? Why do they
remain unmeltd in water
above the freezing point
- A century in Disobeying
the mountains have
made found only few
liably - in Southern Lat
in every part of the sea

2023. Might it not be
contained by capse-
ment in structure
how long a quantity
of ice takes to melt
and might not the
melting be accelerated

N. Milroy

2024. Cap. Mopper Day

Page 76 - 140

— sea water at the sur-
face warmer than the air
in contact with it in
:: 62° to 50°

N. Milroy

— During a gale
afterwards during the
night in a calm the
surface and Mopper
the same way 54 ~~236~~

~~2025~~ - Merri's voyage
Vol: 2, Book 2

W. Milroy

Chapt: 1 "page 439
fol: edita Descript
of the mountains -

~~2026~~ In island found
one in Hudson's Strait
but in the bay -

Progress
W. Milroy

2027. Charles's voyage
Vol 10, 01 return
found the great effect
of a mountain of
ice having suddenly
cooled the air at 3
Days sea distance -

Armo

[Faint, illegible handwriting on the right page]

X
2028 - ^{original copy} ~~Adrien~~ ^{copy} ~~copy~~

Works in the Journal
when he describes the
Journey of Johnson in the
new Philosophy -

- Brugers Characters -
- Fenelon

Geography

~~2029.~~ Canals may be probably run from one lake to another in North America to facilitate the communication and improve the transportation

~~2030.~~ The North American Indians hide their silver in hollow log canoes, when these happen to be torn they cut them smooth with a knife, and sew the parts together with a needle and Oen's Seniors Lang's Boyages

Musellanus

N. M. W. M. W.

2031. Lake Superior
freezes only close to
the shore

2032. The law of Scotland
is much more litigious
than that of England

Miscellaneous
The Treaty of Lord
Duffin and the Earl of
Sutherland passed from
1719 still within their
few years —

2033. It is extremely
difficult to specify
a mechanical invention
for a patent. —

Mathematics

~~20~~ 21. In the 22 prop.
of the 3 books Euclid
speaks of a quadri-
lateral figure inscribed
in a Circle, where the
definition of an inscribed
figure is not given till
the fourth book —

M. Quilley

~~22~~ Can it be proved that
the poplul Kingdom grows
if not will not the earth
become exhausted and re-
quire a reinvolution? —

~~23~~ 26. It is alledged that
all nations have letters
of nobility, the Turks
have none except those

of office — House of
Algeria and the young
noblemen

Mulla?
~~1137~~ The ^{arguments} Romans
must have been more
swabby than the mo-
dom Romans because
they were no heels —

Navigators
~~1138~~ A ship carpenter
of the name of Mills
has invented a new
method of filling shot
holes, this was tried on
board the Hancock
and succeeded very well
— A hole was made near
the Pelvic, and plugged

up. When every thing
was ready for the Exp.
the hole was opened &
the water rushed in, a
Trowell which is a piece
of wood about the length
and thickness of the
arm with a groove
in it was drawn into
the hole, a small rope
was drawn by passing
thro' the hole in groove
of the Trowell, to the
outer end of this a bit
of cork was fixed. This caused
the rope to float to the
surface of the water on
the outside, which was

immediately seized by
a boat hook and a cap
of wood fast to the rope
instead of the cork. This
was drawn close to the
hole in the ship and
afterwards made fast.
The cap was of beech
lined with leather. The
leak was effectually stopped
and the whole was per-
formed almost impercepti-
bly. — The Com-
missioners of the Dock-
yard with many other
judges were present and
approved of the invention.

2039. The Prohawk
and other tribes of Indians
in North America make
use of Deer skins to sew
as with them they sew
the skins both of men
and beards - scalps

Long -

2040. The Indians seldom
pay any attention to
the rising or setting of
the sun, yet they find
their way through the
woods with the greatest
certainty, by ~~the~~ observing
the moss on trees which

Miscellaneous

N. P. P. P.

remains on the north
side but water and drains
on the south. They re-
mark also that the
branches are larger and
the leaves more luxuri-
ant on the south side.

The most enlightened
part of mankind can
not be more attentive
to, nor more exact in
their mode of judging
of the works of nature.

The cone of a twig is
not in the middle but
near the north side.

X
2041. The French people
have been more successful
in civilizing the Indians
than the latter English.
The latter have added
to the natural vices
of this people the vice
of lying and swearing
which unfortunately
they have learned of
us.

Amulmanwin

~~2049.~~ The Troquas are
the braves of all the
Indian nations, they
laugh when you talk to
them of obedience to Kings
they cannot reconcile the

Ordo

• Idea of submissiveness with
the dignity of man; Each
Individual is a sovereign
in his own mind and
as he unconsciously derives
his pride the great spirit
above, he cannot be in-
duced to acknowledge any
other power -

~~2d~~ There seems to be
a principle of life distinct
from motion, sensation or
other external signs, as
appear in the corporeal
animals, they exhibit
no signs of life thro'
out to fishes - quora -

Musculi

~~10~~
11. A man in St Thomas
Hospital who had blood
let in the arm died of
a hemorrhage the next
a drop was found in
the bed. When a vein
and an Artery lay on
each other if the artery
be pinched the blood
may either pass into
the vein and convey
Arterial blood to the
to the heart, or it may
pass there between the
veins and consequently
swell up the arm. This
was the case in the instance
above mentioned.

Arteries

A. B. C. D. E. F. G. H. I. J. K. L. M. N. O. P. Q. R. S. T. U. V. W. X. Y. Z.

116

Magellanus

~~215~~ When a tumor is
 manifested if a humor has
 does not come on in 4 or
 5 days no danger is ap-
 prehended, nature repairs
 the quantity by than limit
 and enlarges the commu-
 nicating vessels

Quæritur

~~216~~ In what manner
 does liquor in the stomach
 affect the brain so as to pro-
 duce drunkenness? — If not
 by fumes evaporation
 by what is the conversion
 called formed?

Quæritur

~~217~~ A Mathematical
 Apparatus for Geometry

Quæritur

~~2049.~~

Metallurgy

Iron is almost the
only metal that is
found by the human
hand. All the other
metals which are
found by man are either
minerals or vegetables.
Ed. Dispensa

~~2050~~ Comparison between
those nations which
have iron and those
that are deprived
of it

Price of iron

~~2051.~~ M.

has discovered that all
crystallizations are formed
on a nucleus of the same
shape i.e. a cube

He can dissect the hardness
with a penknife -

W. Murray

Hydrostatics

~~202~~. When a number
of small vessels empty
their contents into a large
one, supposing both full
whether is the fluid ac-
celerated or retarded? or is
the velocity uniform, and
what happens when the
fluid moves in the contrary
direction

Sounds

~~203~~ Can a sound
be conveyed through
a vibrating string?

~~205th~~ Inure how far
a wave is affected
by the figure of
the stone

Hydrost.

2055. A paper is made
of the interior bark of the
willow specimens have been
collected at the society
This is swept off by the
beetle method

Memoranda

~~2056~~ Try again the one
from Sat: Am: a paper
applied, this is the
circ: for - the other
common Sat with
Vit: and the circ: thrown
into the other forms
Sat: Am: —

Chemistry

Dillo

2057. To a Solution
of Glauber salts (ad)
spirit of wine, charged
alway with in the sides
of the Jar -

2058. Alkali solution
for the Stone
1 lb to a pint of
water makes a
strong solution

Chemistry

The bottle into w^{ch}
the fixed air ^{is} must
hold 3 times as
much as the Solu-
tion -

~~2059~~. In the first part
of Euclid should it not
be proved the circles
cut each other? and it
is now taken for granted
that the chord falls
within the circles, & by
them is this last-^{er} propo-
sition demonstrated in the
2 of the 3 books.

~~2060~~. Vit. and powder
on melted lead pro-
duces Sulphur.

~~2061~~ A wafer lighted
at the candle and
held over a piece of

Mathematica

Chemica

Almo

card paper, the lead
is removed and falls in
drops — The best method
of removing the scale
of lead is with the
Blow Pipe —

~~2062~~. Silver dissolved
in the Nit. acid and
much diluted with water
— add marine acid the
silver is precipitated &
a white powder —
— great divisibility of
matter —

(Or Ho)

~~2069.~~ Josephus' Book

Miscell

Jewish war 23 -
on casting out
Dunk - he believed it

~~2064.~~ Virgil describes a
warlike weapon called
"Caleia" *Traclonico ritu
soliti lingua catenas*

Miscell

Enid 7 line 741
+ Galat original it sig-
nifies a first dart -

Notes

2065. Does not the the-
nomore of a fern
near through a small
hole contradicted the re-
ceived principles of optice

~~206~~ Now comes it to
pass that a person
sick after the exhaust
or coughing of the lungs?
Ophris
Lungs? - whether does
the Aguecom or Tubercle
or both supply the place

~~207~~ Dioxide of Sulphur
Expans
Salt in Ether gives
green - Acholium -

~~208~~ Pure air with a
little Ether - blow
Capers
soap bubbles, with
a red pocket produces
explosions -

~~2067~~ *Chemistry* Liquor Sulur and
marinic acid form a
solid - on hand -

~~2068~~ *Chemical* Shows acid with
an equal bulk of water
Dissolve chalk to saturation - This with Scheele's
oil of Tartar forms a
Solid -

~~2069~~ *Chemistry* Caustic fixed alk
form a proof bent tube
which put a small
bit of phosphorus into
the phial - apply heat
The air is a thick matter
of soap seeds forms a
bubble which will explode

By the application of
a hot iron

Chemistry

~~2070~~. To make the
Liquor Siliicum pound
some green Glass into
a fine powder mix with
some *Alkali* equal parts
expose it in a water
bath, a sublimation is
produced which deliquesces
in air, some days are
 requisite —

~~2071~~. Manganese exposed
to heat without any
acid produces better
air than Nitric —
The air from the new
Salt called the Murexated

alkali is by far the
finest.—

~~2072.~~ The pure air. should
be decanted through
lime water —

~~2073.~~ The Prussian blue
shuts in it is best
from Easter —

~~2074.~~ In the experi-
ment of the Crystals
of Glauber salt, it
will sometimes succeed
by pouring it out,
sometimes by returning
the water into the still

~~July 3~~ Chalk is dissolved
in the muriic acid
for forming a solid
the muriic acid should
not be ~~added~~ ~~added~~

~~July 6~~ In it is popular
that a bag filled
with any substance
for example Euphorbia
when thrown
at a man is suf-
ficient to knock a
man down —

Experiments

De Mo

The strength of the machine
and half thickness of the
glass - That one jar
three times as thick as
another, the former will
hold as much as three
of the latter each & some
egg

~~egg~~ A German
chemist has dis-
covered that the Re-
gulus of Cobalt is
as much or more
attractive by the
Loadstone than steel

Magnetics

2000. The Pike proposed
for the National Guard
is 16 foot 10 inches in
length, ~~spec~~ like
that of Madagascar
but not quite so broad
a hollow socket for
the shaft —

— Thru of the joint socket
9 $\frac{1}{2}$ — No joint in
cup socket or collar

— preferable to a
Bayonet —

War Museum

20th. - The Common is
plant. air prepared
Steam and iron burnings
The best and Cheapest
for Philosophical fire
works, lightest Cheapest
and has not so dis-
agreeable a smell -
Water boiled with
Stigandi Lamp suf-
ficient for boiling the
water - A metal vessel
best for use in making
Hydrog. air at Large -

Experiment

10
5 5

41 15

85 16

3 17 6

3 5

1 5 6

Mr M. Henry

23 Gower St

Mr. Inman L 82. 12

Due 25 Jan 9

Mr. Miller - L 30

Due 22 Oct.

North Woffe house

To Mr. ~~Miller~~ 10 7

Due 4 Jan 9

Mr. [unclear] { 6
 1. 6
 2. 6
 2. 6

 2. 6

 11. 6
 Mr. Bayard . . . 15. 6

Bill 1 ✓
 3 ✓

Dec 11 1817
 W. H. [unclear]

Mr. Bayard
 1. 6
 2. 6
 2. 6

 2. 6

 11. 6
 Mr. Bayard . . . 15. 6

Bill 1 ✓
 3 ✓

W. Cooley - Turner

Cole May

2 Tubes - a Screw
Plate - a raffle
owing him

W. Cooley - Turner
Cole May
2 Tubes - a Screw
Plate - a raffle
owing him

M. Sharpe no 15

Leadwell Street -

- Mary Robinson

at M. Angus McDonald

Walden no 6 South

bridge Edin. -

Dec 16 Sep. 15 10

Northumbria for
- Northumbria book - 12

- under case for Johnson

M. Gillbanks & John

Street J. Dalrymple Street

Dec 16 Sep. 15 10

To the family - 3 3

M. W. -

M. Puddle no 20

South Newington Street

Greenwich Square