

1797
1798

1799

1800

1801

1802

1803

Dover
6th Nov 1788

Paris 3^d Sept. 1788

1111. Pellen air is said to be
made from common at
morphic air passing thro'
Yell. Ether — give what
kind of air is produced? —

~~1112.~~ French carts have high
chests very narrow, wheels
long quite plain, a chain
and axis in perpendicular to
for the road —

1113. Washer women stand in little
cribs in the river Seine
Dry and wash the linen over
the side in the river —

^x
1115. The models in the Bibliothek
royal represent the different ma-
nufactures are carefully well
executed - Books on one side
of the rooms - not given out
any person what ever may read
and take extracts - No
fire allowed in any part of
the building.

1115. In the Palais Royal a
Lense fire a Gun at 12 o'clock
then the Sun shone -

~~1116~~ In the Jardin du Roi
on Picant a ^{piece}
is burnt by a Lense at
12 o'clock a hammer

strikes a bell -

^x
1117. Patache de Royer tried to
take into his Stomach and
blow it out of his mouth -

^x
1118. May not air be thrown into
into the stomach a spit in
Swimming?

1119. Saw at M^r. De la Motte
an instrument for mea-
suring the angles of Curved
Lines -

~~1120. An Apparatus -~~

~~1121~~ Instrument for striking
fire in vacuo. Mechanical
Pump -

~~#22~~. A method of Etching
on Glass as in Copper
by the Fluor acid, to pre-
vent evaporation the spec-
was at first ground and
but acid ground on it —
another way —

~~#23~~. Tin prepared from coal
by a simple apparatus
very white —

~~#24~~. I have not seen a
Cylinder ^{of tin} machine in
Paris —

~~#25~~. A condensing machine
with a coil in a
wire can, constant con-

venience —

~~#26~~. In Dumotiez's shop
several of the Lathis
are of the old construction
with a an elastic piece
of wood placed over them
as in Scotland — The
wheel in the others is
also placed above —

~~#27~~. Berthollet's fulminating
Silver explodes
with the smallest degree
of heat much less than
ammun fulminans —
+ explosion more violent
#28. Berthollet has also
discovered another

Sublimating powder of sulphur
to the Sulphur sublimation
made with the mineral
alkali, which he is trying
to apply to the impregnation
of Gun powder. —

#29. Spoons of Platina
are made for the blow
pipe apparatus and sold
for three crowns — Buckles
Buttons &c —

#30. Platina is fused with
arsenic, it is poured into
an iron mould and at
a certain temperature
it recovers ^{one} a Shoke of gun

powder, it is heated again
and then another Shoke &c
were it heated all at
once it would crack and
become quite brittle —

#31. The new method of
bleaching is by the Deple
Virtualis Mercuric acid

#32. Method of extracting
Sulphur alkali from
Sea Salt by lead —

~~#133.~~ Spermaceti from the
oil probably by the Depl.
gibbated machine acid

#134. Process for Parkes's
lubricating paper

#135. Electric Sec, saw glass
tube on an axis two little
figures on the ends of it,
two small Electric jars
apart about 18 inches long



~~#135.~~ Gun for shooting arrows

~~#136.~~ Machine for producing
air from fit-coal

○ about 10 inches with
produce about 1/2 pint of
air

~~#137.~~ Machine for striking
a bell in vacuo

#138. Electric spirit on a
round plate. Gold leaf
in the center
— Spirit on a globe supported
on a tube

#139. Spinel with the spangles
of different colours

#140. Air pump with glass
cannels to explain the
construction of the A. O.

#141. Sun dial with a quadrant
and cannon fired by a
timer at 12 o'clock. The
time is elevated and Dep't.
agreeable to the altitude
of the Sun.

#142. Specimens of black
Manganese from De-
byshire

#143. Gold is poured on
of Derbyshire it
takes fire, by this a
match may be lighted

#144. Some time ago a
man walked on the
Seine on Air shoes and
Hills

#145. Mr. D. Lortie alleges
that the principles of
Geometry respecting the
comparison of Surfaces are
not just, that there is a dif-
ference between Figures when

considered finally and ~~with~~
regard to quantity - That the
Doctrine of Superimposition
is not always true - Squares
Parallelogram - Triangle. The
one triangle composed of half
the square does not always coin-
cide with the other - Dividing
rod - Several squares divided
into equal parts by parallel lines,
cut into Parallelograms and
Triangles and squares -
- Perpetual motion -

~~1150~~ At W. Davenport's
- Drilling Engine large fly,
- Sawing Machine - Buff and
boring drills - Chain Machine
- Stocking frames common
patent. - cloth of different colors
woven on these machines -
- Silk manufactory, these
the chain made by the ma-
chine above mentioned are
used both for Drums and
primers. Machines for
reeling and twisting -
- Cotton Machine a Spin-
ning frame Proving frame
and Carding Machine -

Double centre contrivance
for pushing in or out the
Cale - quadrant for weighing
the bale as it descends -
Sile Engine moved by a
lever, alternate motion contri-
vance similar to the saw mill
- Machine for carrying slates
- Both letter machines -
- Transverse Dividing Engine
- Fluting Engine - Ma-
chine for working wire cloth
either brass or iron - Bucket
machines - Bucket Descends
whatever way the handle is
turned - Machine for leasing
wool - Spinning wheel of

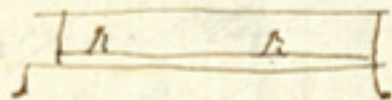
Different constructions -
- Straw cutter - machine
for making whips - invented
many years since in Germany
lately received in Birmingham.

~~7777~~ Glass Manufactory
Fauvabourg A. Antoine
— Polishing — tin plate
Laid on a table a little
mercury sprinkled on
the tin brushed over it —
Then a quantity of mer-
cury poured on and
retained to some depth
on the tin plate —
reflection from the mer-
cury better than from
the glass — The glass
plate is then slid over
the mercury over a bed
of very dry paper, the

plate brushed off the greatest
part of the mercury, weights
are then laid on the glass
which is just covered with
a cloth, the table is then
a little inclined to allow
the superfluous mercury to
run off —
— First grinding with the
sand of a stone found only
at Fontaine bleue this
stone when struck with
a hammer flies to powder
water in the first grinding
— Polishing with yellow
and aquaportis
— Spring of wood with a

Iron which passes on dif-
ferent parts of a Board above
- below a rectangular piece
with a handle, covered with
on which the yellow
is put - women as
well as men employed in this
work - In the grinding two
glass plates are ^{ground} ~~put~~ on
each other with the sand
~~below~~ -

1148. Lecture on Electricity
Experiments - Sword -
- Bladder with inflam. air
candles lighted with this -
Pistol on a glass stand
- Lamp - pistol charged at the
Lamp - Dancing figures



- Several large Globes like
the two hemispheres of the
air pump standing up for
conductors - In with the
Medical Electrometer -
- Lightning round the room
Spark on a Circular board
on the roof -

~~1149~~. The rope pump was
invented by a letter carrier
in Paris - (Double crane
the Lewis' Dancing too?)

~~1150~~ A German author has
truly endeavored to prove
that Sol. Temple had win-
dows, joints and metal
on the roof.

1151. In spinning cotton with
resin, the resin should be
finely powdered and put
into a kind of deering box
- gear, which is the best
form and support of the
cotton -

Long
#152. ^{Electrical} batteries are
commonly made at
Paris in form of a com-
mon quart bottle —

#153. Malina requires 4 or
500 strokes before it becomes
solid and malleable —

London 1st Oct. 1788

#154. Capt. ^{has}
written to Mr. M^r Cuthbert
that he perceives a vari-
ation in the compass in
the morning from the
evening? —

11

#155. To shew whether the
attractive power resides
in the North or South
poles of a Magnet or
both — Let the Magnet
be balanced with a
trap moveable bar

#156. Doctor Juvring thinks
the variation of the
compass arising to
the accumulation of
sand in N. America —

#157. Green famous for making
artificial Magnets, was
found to touch a horse

show magnet for Mr. Flou-
he asked what strength he
wanted, Mr. Flou- offered one
pound. Green said he could
not give it so small a power
but would make it lift
five pounds, which it per-
formed to a grain. This
was proposed before with out
any other examination
of the magnet than weighing
it in his hand -

#58. Corroded Copper with
the Petrus acid and Sp: 2
makes a beautiful Green
- Zinks with the Vit: acid
Sp: V. a Blue.

Bismuth with Sp: Nitro
makes a vast quantity of
flame inclining to a Light
colour -

#59. A solution of blue Vit:
mixed with some filings
of Zink makes a green
bordering on blue -

#60. Filings of Copper with
the Vit: a. diluted pro-
duces no instant air
- no spirit of wine itself
unless assisted by the in-
flam: principle of some
metal joined with it, so
Berdigean which has lost
its Phlog: produces none -

1161. If a young frog is put into a glass not quite filled with water, and a small ladder placed in the glass, the frog will become a sort of barometer, climbing up the ladder into the air in good weather, but creeping in the water in bad weather.

1162. If the wooden cover of Mr. Cuthbert's compass box is drawn suddenly off the needle is much agitated, & quies in this owing to Electricity? —

1163. It is alleged that the New English Manganese will correct & dephlogistinate the ^{mistake} marine acid. — Saxon Manganese is Amittab the best —

1164. The new pungent salt is composed of Phosphoric acid and marine alkali. — Sicca cant barilla the best.

1165. Mr. H. of Birmingham buys up the residuum of process for Nitrous acid consisting of veget. alkali and Vellri: acid

1168. At Mr. Braithwaite's
Engineer's Office and Plans
saw a 24 lb Gun one
of those weight by Mr Bz
and some from the Spaniards
battering ships. The barrel
is said to contain Gold.
The cheeks of the carriage
are composed of a Lion
cut into two equal parts
- new mode of pointing
by a screw thro' the
axis of the wind trunks
- turned by the foot. -

1169. Saw at Braithwaite's
some excellent water pumps
- Parallel motion in two
effected different ways -
one way is by a wheel col-
ling in the inside of a
fixed piece

1170. The Mr. Culloch's
compass has had the
use taken off several
times, there is no unusual
agitation of the needle.

1171. The plant called the
Prophet discovered first
in the Island of Tortola
she puts forth a whole
blossom before rain, when
the rain comes it warts
the flowers off -

1172. Martin the Capt.
Cambell near the Pt.
of Jamaica was caught
by a thunder storm
during which the needles
kept quivering quite much
at the end they were found
totally deprived of their
Potency
Magnesium this happ.
in the year 1727 in Dec.

117^x3. All the Tentacles in
the ship near the powder
room are made of salt glass
and horns will get red and
burn, salt will not.

#74. M' Culloch put a piece
of salt beneath pieces
to prevent it from warping
fixed with paste.

This has tent done by others

#75. Bought a perpendicular
a box like a common
snuff box, ~~and~~ the lid and
bottom of glass, a thread
passed by a piece of cork

a small ball of wax and black
lead at the lower end does
not touch the bottom -
- This is the effect

#76. M' Culloch has disco-
vered a method of ascertain-
ing the position of the true magne-
tic line of the needle, by which
he can make all his com-
passes perfectly agree -

#77. If one side of a magnetic
bar is heavier than the
other, the poles will be
near the heavy side -
x guns with both poles be
near the same end -

~~1178~~ If a piece of ^{solid} Gold is
thrown into lead in fusion
the Gold is said to be melted
in a short time Bogue

1179. M. Cullock's improv^t
on the Gauge for a condenser

1180. By altering the manner
of touching Magnets, which
could not otherwise be made
strong, are rendered very
powerful —

1181. To render common lead
sufficiently soft for pan-
cils — common lead can
not be rubbed off paper
by Elastic Gum, &c —

1182. Spirits are whorled
in Casks by dissolving
the resinous part of
the oak —

1183. In Saxony young
ashes are bent into near-
ly a circular form in
thin shape they grow
till they are of a proper
size they are then made
into carriage wheels which
last much longer than
those bent by art —

1184. One objection to the
bent wheel is that the
fibres on one side the rim

are calced, on the other
too much unbracted

#85. M. Hesson says the
glass of Phosphorus is
not soluble in water
This is a mistake, it is
more ^{even in air} than vegetable al-
kali

#86. Amber a Gum from
a particular tree not
now to be found, the shape
of the leaves is a proof of
it

#87. A piece of Silver cast
into an ingot, I once
a piece of leather partly
rotten, partly healthy
absorbs it - A bit of charcoal
adds phlogiston and
consequently restores the
Silver that may be cal-
cined on the surface

#88. In tertiary small
Frogs are caught on
the tops of trees, these
the Inhabitants make
use of for a Barometer
- Common air jar -

~~1189.~~ A piece of paper is
with much difficulty
lighted on burning
charcoal Phlogiston
extinguishes it — if a
quantity of oil is thrown
on the charcoal it will
not take fire —

1190. A method for making
windows fall down by
a shower — Pyram?

~~1191.~~ A toad in the hot
part of the metal cast into
into a lump renders

The process, removed by other
storing with a stick, it
gives Phlogiston.

1192. A Thermometer should
have a small quantity
of air left in the tube.
W. N. —

1193. The ~~Europe~~ part
ordered all the remnants
of the old paper in town
to be taken down
and the Earth boiled
for Salt water — The
earth seen in General
Lynceus three P. Cent.

~~1194~~. Great many Craters
of Vol: near Smyrna
none now burning -
Is not this last circum-
stance the reason of the
many terrible earthquakes
experienced in the Asia
minor?

~~1195~~. The smoke from
Etna, Stromboli &c
appears rather like
steam than their
smoke - white.

~~1196~~. Volcani sold here is

said to have been first
lately found in Calabria
opposite to Messina

~~1197~~⁷. A method of making
an alarm for reform?
The Gardiner at what
time to take in his hot
bed plants — compound
metal

~~1198~~. The brayid diam:
are not equal to the
Indian

1199. More stones are set in
Turkey than any part

of the world - set in a
particular way -

#200. A thermometer

may be made by bal-

ancing the tube on its

center of gravity ^{when} at a me-

diocre temperature.

When the temperature

increases the bulb prepon-

derates, when cold increases

the bulb preponderation.

#201. To take out the Diam.
from a ring, throw it into
aqua fortis the sweep is
is neutralized by heat.

#202. The Diamond cannot
be dissolved by any men-
struum known, & care is
taken the case with all the
precious stones?

#203. At Liverpool converted
steel is made in five
days as good as any what
ever -

#204. In making steel if
the air get in thro' any
hole in the sheet, the
charcoal is burnt and
that part of the bar near
the hole continues iron

~~1206~~. Method of making
plate glass at Venetian
maker blown in the form
of a cylinder, ends cut
off, cut also along the
surface parallel to the
axis, it then falls down
in the form of a resonance.

~~1207~~. At present the metal
is brought from the furnace
in a vessel or pot
it is poured on a brass
plate and rolled with
a brass roller - The plate

at present was made by
Mr. Wilkinson and cost
1200£. It was ^{is} 11 by 7 feet
and 3 inches thick, it weighs
5 Tons and was turned in
a lathe by a water wheel
instead of being ground -

~~1207~~. In cast steel no flux
is used, the steel will melt
of its self.

~~1208~~. Oil Stone from
Candia very cheap
by the Cut. at Smyrna

1216. In the countries
between Jordan and Kufe
where the soil is fat
and the weather fog,
warm and dry. ~~The~~
Salt Lake is produced
The ramparts of the
old forts afford great
quantities. - Earth mixed
in tubs and stirred
filmed, then boiled
to a certain consistency
and precipitated with
veget. alk., the ashes
of a certain weed -
from 3 to 4 % Cent.

~~1217~~⁷ The salute of Turks and
Tartars, is to lay the right
hand on the heart they
never touch the head or
brow, when a woman
serves hands or cup of
coffee she says her husband
on her breast-heart -

~~1218~~ The Musli at Constantinople
unites the two characters of
Archbishop and Chancellor,
at the head of both Church
and the Law Department.

~~1997~~. The present grand
vision was not many
years since a poor boy
selling soap in the streets
of Constantinople —
He is the same Minister

~~1998~~. The Cap. Pasha is
the High Admiral with
great powers. —

~~1999~~. Janissaries a kind
of militia — The Bostangy
Gardiners — are the life
guard men —

~~2000~~ Russian Necessarily
sleep on the ground without
beds. men and women prom.

~~2001~~ Antiques particularly
Greek and Roman
cabin are dug up in great
quantities about Smyrna
where they are sold very
cheap —

~~2002~~ To make a Cypher
with the Ouzagraph.
— Cakes ~~except~~ ^{with} in wine
mint — X

~~2003~~ Mr Macondat of
the Lathie for ³ ~~buttons~~
buttons is made of Steel
The cotton jewel, the Red,
11,160 P. Minute, wears long.

It is a flat lath wheel
31 inches dia. the pulley
1/2 inch thick. foot wheel
180 R. Minut

1726. The Winding Engine
at Birmingham has made
the impression not by
the falling of a weight
but by the Pressure of the
Steam engine on a kind
of valve at the Center
of the beam on a per-
pendicular beam at
the lower end of which
is the Dye

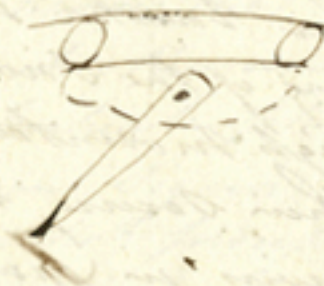
1227. Mr. Cartwright proposes
a new construction
of the Mosaic Glasses
Glasses hollow in the
stem, fixed axis hollow
tube turns round and
carries the rubber round the
bein of the Glass. On the
top of the fixed arbor
is a circular piece which
is pressed with the finger
on the rubber —
— game will not the
rubbers of the Glass
on different parts and
at different times prove
sometimes incompatible

with the note, and position
of the fingers?

~~1228~~ The Rotative motion
was first hinted by Mr.
Gordonson to Mr. Murdoch
but not its application
to the Steam Engine, this
was the hint of Mr. Murdoch
to Mr. Watt.

~~1229~~ The Engine for Milling
corn said to have been
invented in Birmingham
has been employed by
the Tartan from time im-
memorial. The Tartan Eng.
consists of a convex piece
turned by a lever per M.

to a concave piece the piece
of loam rolls between



~~1230~~ Artificial yeast by
Miss H.

1231. The Borethorpe Water
Course which will empty
themselves into the Black
sea river and fall like
the Mill. - The Bor. near
its mouth rises 18 feet
greater height.

~~1232.~~ The cause of the said
said river overflowing
their banks is the melting
of the snow on the
high mountains near
their source, some of the
rivers in France also
rise a little in
the months of ^{and}

X
1233. There are few carriages
in Constantinople, the streets
are so narrow that two cannot
pass each other ~~except~~ in
some particular places -
- The Grand Signior in all
his publick processions
rides on horse back -

X
1234. The watchmen sit on
a sopha by the side of
the street smoking, armed
with a large cudgel which
they apply to the shoulder
of any disorderly person
with great freedom.

X
1235. The military cooks
have the power of

almost
beating to death with a large
leather strap any one of their
corps whom they may choose
to meet, for the smallest spi-
ritualism.

~~1236~~ At Constantinople
there is now published
an Edition of the French
Encyclopedie. The plates
are from Paris —

~~1237~~ The National Debt of
Great B. consisting of £42
Millions, in ten pound
Banks of England notes, weights
47,265 pounds suppose one

^{Lib 94}
man, to carry 472,650 one
hundred men would be requi-
red to carry the whole

~~1238~~ Flying with wings
moved by a small Steam
Engine M. H. —

~~1239~~ A large hawk can
take up a Lamb with
together form a body of
great weight, does not this
invalidate the objection
to flying drawn from
the weight of the human
body, compared with
the weight of the man.

#240. If the feathers in the
tail of a sparrow are
plucked off or cut, the
sparrow flies as well as
before, it ascends, descends
and turns with as much
agility as formerly. What
then is the use of a Tail?

#241. Line strength chiefly
consisted in the contraction
of the muscles of jaws
the more full and pro-
jecting the place of the
insertions in the breast.

But the contrary takes place
in poultry. There is a
projection in the breast and
they cannot fly, whilst
a sparrow, - both of, are hol-
low in the breast. -

~~#242~~. A patent for making
Jopit alkali by the
Litharge of lead. It has
been long known that
when Litharge and sea
salt are rubbed together
the Litharge attracts all
the acid and leaves the
Jopit alkali pure

~~1243.~~ Mr. K. makes use
of lead in making his
Sesqui alkali but instead
of removing the lead in its
metallic form, he converts
it into white lead —
This lead is much whiter &
better than that made in
the common way —

~~1244.~~ Might not a ~~rudder~~
in some cases be placed
over the head of a ship? —

~~1245.~~ Some anatomists
endeavour to prove that
the feathers of joints are

filled with inflated air —

~~1246.~~ Feathers do not appear
absolutely necessary to
fowls. A bat wing has
none and yet the bat
flies and moves with
more rapidity than most
other birds —

~~1247.~~ Silver is twice re-
quired first at large;
then in the small or middle

~~1248.~~ It seems impossible
to fly without some
support in the air the
"mark" must be supposed
to raise this as well as the man.

1249. Platina is seldom
found without grains of
Gold intermixed with it.

1250. Table of Rain

months	Grenada Inches	London
Jan ^r -	9.5 - - -	2.1
Feb ^r -	6.4 - - -	.5
March -	2.6 - - -	1.2
April -	.8 - - -	.7
May -	2.9 - - -	1.1
June -	9.3 - - -	.9
July -	13.9 - - -	3.
August -	11.9 - - -	1.
Sept -	19. - - -	.7
Oct -	12.7 - - -	2.9
Nov ^r -	9.1 - - -	3.8
Dec ^r -	15.5 - - -	2.4
7	116 9.	20.3

1251 Degrees of heat at which
water boils under different
pressures of the Atmosphere
Degrees Inch of Mer. Atmosphere

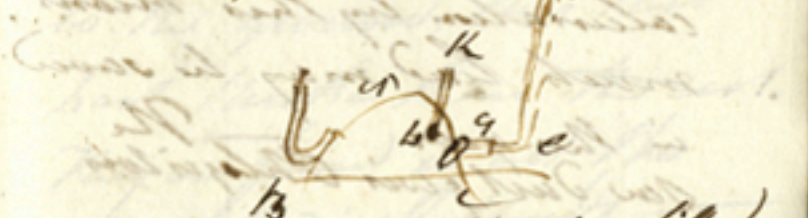
100 -	1	
119 -	2	
130 -	3 $\frac{1}{2}$	
135 -	4	
149 -	6	
154 -	7 $\frac{3}{4}$	
192 -	15	
213 -	30	1
236 -	44	
252 -	60	2
275 -	90	3
290 -	120	4
308 -	150	5

#252. In a piece of ice in platinum
 in water at 56°, it pro-
 duces the same in 100 times
 the quantity at 55° —

#253. Both Experiments
 have proved that Steam
 produces in water twice
 as much heat of boiling
 water —
 A pipe from a boiler was
 immersed in a vessel of w.
 supported from one end of
 the beam of a balance, the
 measure of w. from the condensed
 steam was ascertained and the
 heat by the Therm. by this Expt.
 was found 4°. Steam contains more
 heat absolute than water —

oil burner on the surface of the
 w. with inverted cup; and under the Expt. in
 brass

#254. The table 1231 was
 made from the following Exp.



A. B. C. is a boiler of a box filled
 with mercury & F. a float
 with a piece of wood floating on
 the mercury. B. is a Ther.
 The quantity of the steam is
 ascertained by the floating gage
 and the degree of heat by the
 Ther. —

1256. Saw dust thrown on
melted lead prevents
calorisation by this means
much lead may be saved
in the year. The
saw dust gives Phlogiston

~~1256~~. To determine whether
rocks receive their color
from the sun light
saw reddish red in a pot
in a dark cellar

~~1256~~. Supple Jacks lay
hold of any tree they
meet with ascend to a
great height, run horizont.

along a branch from which
it descends perpendicular
to the ground, this last
part thicker than the rest.
They are found in all the
west-India Islands

1255. The
serpents also on a tree but
it soon deserts its support

~~1259~~. The reason why a
metal when in a state of
fusion has its surface often
calorized is the contact of the
surface with air

1260. Spiders are extremely
diff. in their characters &
dispositions - Some dart on
their prey by dart of quick
motion - long legs - Some
have webs - Some build houses
a door on hinges, a string
when pursued the retreat
into their houses and shut
the door -

1261. A Peak on the highest
mountain in Commanica
is unfathomable - Have
not there been eruptions of
ancient volcanos?

1262. A sculptor and a
painter arguing with respect
to the preference of their respective
arts, the sculptor the matter
to a blind man - The man
after feeling the head advanced
it, he asked what all
these things were done
on the smooth surface
upon receiving an answer in
the affirmative, he immediately
replied that the painter
must be the most ingenious
artist -

~~726~~ Principal phenomena
of Mucianus in the West
India Islands with the proba-
ble causes of their production

~~726~~ What is the cause of the
sun stroke with the par-
ticular phenomena —
Delirium —

~~726~~ Surgeon Cr — k in the
operation of the trepan,
pressed gently on the
brain, ^{the} patient fell asleep
on removing the hand he
awoke and felt the pain
tho he respected several
times with the same consistency

~~726~~ (Part 3 — 2 observes
both in his own practice
and at the hospitals that
women are brought to bed
easier at the new and full
moons, next at the quarters
than at any other time
of the month

~~726~~ The Lord Mayor it is
affirmed is the only existing
Magistrate at the death of a
King he swears in the Chan-
celor, and Archbishops of Cantuar,
who afterwards administer
the oath to the new King.
10th Nov^r This Lord Mayor

~~176~~ 2 A piece of whipcord
was first applied as a
Hygrometer by M. W. M. Moll-
neux - the beard of the wild
oat by Doctor Lefebvre - a hem-
lock by M. Saussure - whale
bone by Dr. Luce of Geneva.

~~1769~~ 1. Pitch tar resin and
Turpentine all produced
from the same tree the
pine -

1. By paring off the bark
the sap runs down into
a reservoir prepared for it
This is afterwards strained
thru a kind of basket what
passes thro' is Turpentine
what remains in the basket
is composed with water and
then distilled - Oil of turpen-
tine comes over and resin remains
in the retort -

2. The tree is cut into large
chips and burnt in a cave
covered with tiles, a black pitch

just run down through a hole ^{small}
in the bottom of the can, this
is far which when purified by
boiling becomes pitch

~~1270~~. May not the ear be
affected by proper instrument
to as great a Degree as the
eye - A Concert by reflection
more perfect than the concert.

Sounds
The construction of instrument
for hearing may enable
us to converse with a
friend at a distance wth
a person placed between
them hearing any thing
of it - water with singing
shell - even by sound

1271. Is it possible to reverse
sounds by a concave mirror?

Sounds
1272 The London Carpenters
make their oak scabbles
rather longer than those of
fir - give the reason?

From Arts
1273. The Elliptical arch is not
so strong as the circular
In this arch there are three
different centers to which
thevous are directed

From Arts
1274 Piers should not be left
than $\frac{1}{2}$ nor $\frac{1}{4}$ than $\frac{1}{4}$ of the
span - Difficult to determine
in every case the

De Mo

1775. When the scabber is long
the pitch of the roof may
be left, a low pitch more
beautiful than a high one

1776 At Nuremberg at the lower
people suspended the cradle
on an elastic steel fastened
in the wall which gives it
a perpendicular vibration
The mother suckles the
infant with milk put into
a cow's udder with a small
bit of sponge in the point
this is suspended over the
child's face which it sucks
Take the nipple when it
is worn

1777. Watts Copying Ink.
Take extracts of Galls $\frac{3}{4}$ oz
Copperas - - - - - $\frac{1}{4}$ oz
Alum - - - - - $\frac{1}{2}$ oz
Gum Arabic - - - - - $2\frac{1}{2}$ Rhenish
Waters - - - - - $\frac{1}{2}$ pint

Disolve the Gum, and extract
in hot w. when dissolved
add the copperas & Alum.
leave it two days in an open
vessel decant it and keep it
close corked to prevent the
precipitation of the iron
N.B. Extract of Galls may be
made from red wine the Galls
to powder, boil it gently

in soft water for about half
an hour when well filtered
and washed by boiling to
dryness -

Ditto
1973. Receipt for Red Ink
Take raspings of Brazil
wood 4 oz. Infuse for 2 or 3
Days in strong pale Vinegar
abt 1 or 1 1/2 pint according to
the strength of the colour in the
Brazil. Then wash it gently
an hour in an earthen
vessel, and filter it thro' paper
while hot into an earthen
vessel then put it again on the
fire and dissolve in it pint 1/2 oz
Gum Arabi and afterwards of
Mum and White Sugar each
1/2 oz

1279. Red Ink grows pale
by standing, it is restored by
boiling for a short time. The
sheet with the ink in it may
be put in boiling water -

1280. How to ~~clean~~ *blacken* Raths nose
Dip the article in to the soft
Liquid and afterwards into
a steam of running water

Blackening
Golden Aqua Fort:
17 Lit at 1/6 - 1.5.6
Oil. Vint: 24 Lit } - 8 -
at 1/2 - - }
16 Lit - - - 1.13.6

1281. The Pyrites is laid on
heaps with furrows like
Potatoes furrows bedded with
clay, exposed to the air & so
dissolves the liquid runs into
cisterns ~~from~~ ^{from} ~~the~~ ^{the} ~~iron~~ ^{iron}
iron are thrown in to give
a sufficient quantity of iron
ingredient, it is then pumped
into a leaden boiler and
evaporated to a certain point
then left to crystallize

Manufacture

1282. The Lapis calaminarian
the stone from which Zinc
is formed is mixed in powder
with the copper reduced into
grains, the Calamin is at the
bottom bears its furrows deep
through the copper and works
with it penetrate it. It is
afterwards exposed to a strong
heat when the Lake of the Cal.
remains - this is brass

Process

Princis Metal or Bath Metall
or Pinchbeck is made by exposing
the Copper to the furnace with
regular of Cal. or Zinc or Spelter
Leaves of princis metal are only
exposed to the furnace of Calamin

1213. Brandy has been coloured
black it may be restored by
succinic acid —

1254. Doctor Darwin of Duby
killed a tape worm which
was found dead next morn.
He also kills lice without
heating the child
all this by Electricity —

1255. Camphor dissolved in
vett. acid loses its smell
add water the camphor is
reproduced by adding water

1256. Mixture of Nitre & Comp
alkali with the vegetable
will produce a solid —

D. 7 Nov. 1788 — 18, 764

W. L. L.

of H. L. L.

or