

N^o 1

Fine arts

1. A copy of a Crayon picture
it is said may be taken by
simple pressure against the
paper, the first copy will be little
inferior to the original, and the
original it is alleged will be
restored by the first experiment. D
2. There is no true method of
drawing the Volute. A regular
Inuit cap is a perfect Volute
— Come no part of a Circle
3. In building a wall with bricks
in a sloping form called battering
~~is~~ the bricks should be laid
in a horizontal position and
the ends sloped

4. What effect has salt water on
iron, with piles kept constantly in
salt water decay sooner than in
fresh? Does the temperature tend
to preserve or destroy the piles?
5. Would it be of advantage to set
down in the wall the ends of a
joist and girders? — no —
6. What is the best method of clearing
the foundation of a building of water,
when the depth does not exceed ten
feet — any other depth —
7. The Gothic architecture is equal
to that of the Ancients in strength
and superior in delicacy —
8. Aquatic buildings are done with
terrace mortar — i.e. part of the
lime must be unslaked and reduced
before it is mixed with the sand

9. In springy ground piles are
sometimes the worst mode of re-
curing the foundations of buildings,
by cutting the ducts they lay the
piles under water —
10. About Mull and in some other
parts of the east coast of England
there are a great many dolerites
there they clear once in ~~ten~~
~~or eight years~~ or ten years, the
wind blows out on the banks
produces a crop of white mutton
superior to display the expense
of shearing — There is no winter
in any part of the country —
11. Smoke ascends in a ~~space~~ ^{Cybernetes Coll.}
~~funnel~~ should not the vent of a
chimney therefore be round? —
- ~~79~~ A contrivance to make windows
Escape all of them before when a shower
comes on —

12. The Elliptical arch is not so strong as the circular - It is somewhat singular that the ancients never constructed Elliptical arches

13. Arch - Portico - Colonnade - Arcade - Arch or Portico is small and has commonly a pediment over it - When long it is called a Colonnade - When this Arch is arched it is called an Arcade -

14. The span of a Bridge may be from $\frac{1}{5}$ to $\frac{1}{6}$ of the span -

15. The Catenary curve was never invented -

16. The Center of Walnut timber bridge was raised by screws, that of Black pine, by wedges -

The Center was raised very soon after the Arch is finished -

17. The span of bridges weighs less in water than in air according to Mr. Hutton. But this holds only when the water gets beneath the foundation to form an upward pressure -

18. Carpons and Coffin dams are made use of in raising the foundations of bridges, the former when the foundation is to be strengthened the latter when there is a rock -

19. The London Carpenters make their oak scabbings of the same dimensions as those of Deal. Some oak is much stronger than deal is not the above practice abroad -

20. As the Elliptical arch has three Centers, it cannot be so strong as the circular -

21. The thickness of the pieces of bricks should not be less than $\frac{1}{6}$ nor greater than $\frac{1}{4}$ of the span - The proper proportions not easily determined in every case -

22. When the Stiles are large the pitch of the roof may be less. A low pitch most beautiful -

23. It is said that Lime made from Chalk cannot be used in building - what is the difference between this and lime made from Lime Stone?

24. What effect has the addition of a superstructure on the appearance of a Column?

25. In what respects did the ^{ancient} ~~modern~~ mortar differ from the modern?
- Same - Sand - proportions - Tempering - Frost - Durability

26. What was the object in fluting ancient columns? Some say it was to support the spires -

27. A cement for walls may be made thus. Take ^{fine} ~~poor~~ chert dry it in an oven, reduce to fine powder. This wrought up with lime and fine sand makes a strong and durable cement or plaster - This powdered chert answers well to throw on the surface of metal to prevent severe oxidation -

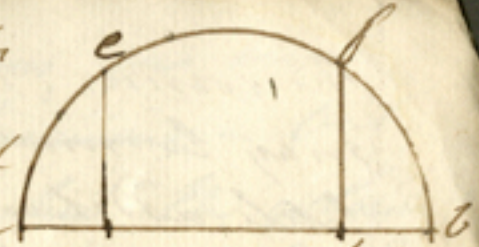
28. It is asserted by some framers that objects are fore shortened in the Column or Column and that the columns are confused by the different refrangibility of the rays - The picture is said to be less than it ought to be in the proportion of 9 to 10 - Query what is the cause of fore shortening?

29. It is alleged that the ancient columns had little or no swelling - Query what is the use of the swell?

30. Some of the ancient columns were swelled others not, but none of them in any part cylindrical - Consider - Query by what standard can the true - best - figure be ascertained?

31. Method of determining the diminution of a column.

Let ab be the diameter of the Coll: at bottom cd at top. Draw ce & fd at right angles. Divide a a c fb into any, the same number of equal parts, and the height of the Coll: into the same by lines parallel to bc base. Draw parallel divisions from the former divisions to the latter, then mark the diminution - Consider -



32. An iron bridge may be built of a much longer span, than when made either of wood or stone - Hooks - May be built without any support, except a few piles - No center wanted -

33. An arch such as is formed by a handkerchief held by the four corners but for the ceiling of a room: If on half give way, the other will stand - Presure principally on

- the corners. By this each a house
may be made fire proof and at very
little additional expense - Each with
34. Some Architects alledge that the
Tuscan had no order and that the
Vitruvian contrived it for them. This
can be proved not to be the case
The projection of the Tuscan is $\frac{1}{4}$
of the height of the Col. - St. Pauls
Covent Garden - near this proportion
35. The Chinese make their lines of
oyster and other Marine Shells, some
lines of Coral (Chinaman)
36. In China the buildings in ge-
neral are of one story - Merchants
have their ware houses of two, and
the Emperors Princes are of three
or more stories -

37. When water colours are used
the art is called Limning - but
colours painting, when the colours
are wrought up with Venetian Egg
and other matters without oil it
is called Distemper - When the
colours are wrought into the
plaster before it is quite dry, it
is called Fresco, this lasts as long
as the substance ~~is~~ with which it is
incorporated - Several ancient
paintings in Fresco have been lately
discovered in Ruins &c -
38. Relievo - Relief in Sculpture is
when the figure projects or rises
from the base or ground - Also most
of all Bases ^{little} such as in coins
medals Fringe &c - Some Relievo
when half the figure rises above
the plane -

39. Chiaro oscuro light and shadow
is when objects painted are relieved
by light and shadow - Landscape
perspective -

40. The best method of suspending piles
for the foundations of bridges or houses
is to place the outside. The beams
in Minsterium and pile on which
the Temple at Ephesus was built
are not in the least corrupted.

41.