

Badische Landesbibliothek Karlsruhe

Digitale Sammlung der Badischen Landesbibliothek Karlsruhe

The young man's book of amusement

Halifax, 1848

The Magic Bottle

[urn:nbn:de:bsz:31-100120](https://nbn-resolving.org/urn:nbn:de:bsz:31-100120)

the other three; the question is, how they shall exactly divide the Wine by the help of these three vessels?

First, from the vessel which containeth eight gallons, and is full of Wine, let five gallons be poured into the empty vessel of five, and from this vessel so filled let three be poured into the empty vessel of three, so there will remain two gallons within the vessel of five. Then let three gallons which are within the vessel of three be poured into the vessel of eight, which will now have six gallons within it: that done let the two gallons which are in the vessel of five, be put into the empty vessel of three, then of the six gallons of Wine which are within the vessel of eight, fill again the five, and from those five pour one gallon into the vessel of three, which wanted only one gallon to fill it, so there will remain exactly four gallons within the vessel of five, and four gallons within the other two vessels. This question may be resolved in another way, but I leave that as an exercise to the wit of ingenious readers.

The Magic Bottle.

Take a small bottle, the neck of which is not more than the sixth of an inch in diameter. With a funnel, fill the bottle quite full of red wine, and place it in a glass vessel, similar to a shew glass, whose height exceeds that of the bottle about two inches; fill this vessel with water. The wine will shortly come out

of the bottle,
to the surface
the water en
of the wine.
specifically
place, while
An effect
bottle be fill

Two number
propound
(out of 3
numbers
person sh

Suppose
John two n
as ten and
chuse one o
to discover
chosen, you
the other o
tively that n
and cause
shall have
the two pro
the sum to
said sum be
secret, ende
take the half

of the bottle, and rise in the form of a small column to the surface of the water; while at the same time, the water entering the bottle, will supply the place of the wine. The reason of this is, that as water is specifically heavier than wine, it must hold the lower place, while the other rises to the top.

An effect equally pleasing will be produced, if the bottle be filled with water, and the vessel with wine.

Two numbers, the one even and the other odd, being propounded unto two persons, to the end they may (out of your sight), severally chuse one of those numbers; to discover which of those numbers each person shall have chosen.

Suppose you have propounded unto *Peter*, and *John* two numbers, the one even and the other odd, as ten and nine, and that each of those persons is to chuse one of the said numbers unknown to you. Now to discover which number each person shall have chosen, you must take two numbers, the one even and the other odd, as two and three? then bid *Peter* multiply that number which he shall have chosen by two, and cause *John* to multiply that number which he shall have chosen by three; that done, bid them add the two products together, and let them make known the sum to you, or else demand of them whether the said sum be even or odd, or by any other way more secret, endeavour to discover it, by bidding them to take the half of the said sum, for by knowing whether