Show & Tell: Tell & Tally

#41 of Gottschalk's Gestalts

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of the Organization & Exposition
of Mathematics
by Walter Gottschalk

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☐ tell & tally

Δ a word with an old-fashioned meaning
that is still with us
is
to tell = to count/reckon
as in

- bank teller
- election teller
- all told (= when all are counted)
- untold wealth
- to tell the time
- He telleth the number of the stars;
he calleth them all by their names.
Psalms 147:4 KJV

∆ the three verbs below all have the meanings of
to count/account/recount/reckon/relate

to tell (Modern English)
from
tellen (Middle English)
from
tellan (Old English)
from
talu (Old English)
= tale

∆ note that

a teller tabulates a tally
a teller totes up a tally
a teller totals a tally

wh ing (= where in general)

• a tally = a record of a counting
or
the act of making a record of a counting

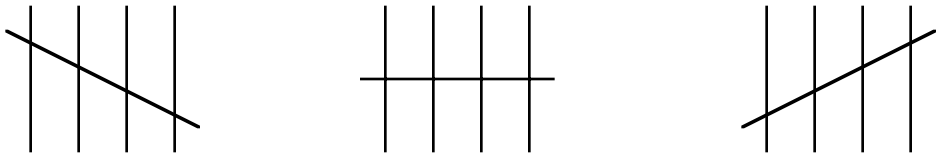
& inp (= in particular)

• a tally mark = a vertical/horizontal/slant stroke
or
some other distinguishing mark,
usually with a specified numerical value such as 1

• a tally stick = a wooden stick or bone
used to make a tally by notching

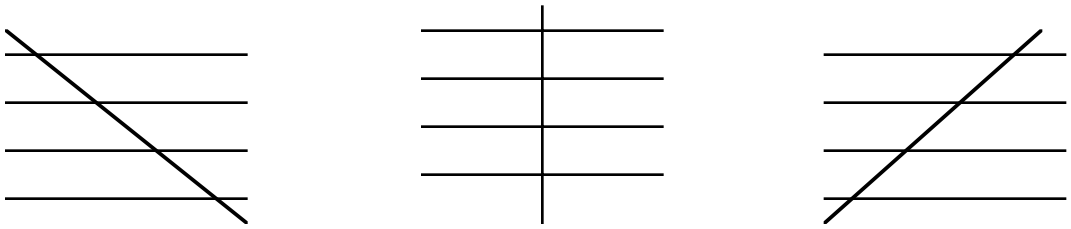
• the word tally
may also be used as
a transitive or an intransitive verb:
to tally = to make a tally, to record/tabulate
eg
to tally (up) the score in a game/contest

∆ the five-count tally mark combination of
four vertical strokes
& one slant/horizontal stroke



or

four horizontal strokes
& one slant/vertical stroke



represents a right/left hand
with extended four fingers
&
with crossed thumb

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Δ in principle

all positive integers may be denoted by tally marks
viz
just write down n tally marks
to denote the positive integer n;
this method becomes a practical impossibility
beyond very small numbers
which fact was recognized by
the Roman system of numeration
&
the ancient Chinese system of rod numerals

Δ there is good extant artifact evidence

for the statement that
the Indo-Arabic numerals
for the first three positive integers
were suggested by tally marks
viz

• one 1 is from a single vertical tally mark

• two 2 is from a pair of horizontal tally marks
where it is attempted to write them cursively

• three 3 is from a triple of horizontal tally marks
where it is attempted to write them cursively

Δ ‘tally’ is related to ‘tell’ in sense
but not in etymology
because

tally (Modern English)
from
taly (Middle Englsih)
= tally
from
talea (Latin)
= lit: heel-piece
(since made from animal hind-leg bones at one time)
= bar, die (one of two dice), rod, staff, stake, stick
from
talus (Latin)
= ankle, heel