Shown below are two fourth-order word squares, with all words in each square reading horizontally and vertically:

\[
\begin{align*}
\text{JUTE} & \quad \text{PURE} \\
\text{USED} & \quad \text{UREA} \\
\text{TEND} & \quad \text{REAR} \\
\text{EDDY} & \quad \text{EARN}
\end{align*}
\]

The first square is an ordinary one, the second a "progressive" one. In a progressive word square, each succeeding word is formed by removing the first letter of the preceding word and adding a new letter at the end of the word. This results in one set of diagonal lines showing absolute letter invariance. In the example above, the invariant diagonals read: P, UU, RRR, EEEE, AAA, RR, N.

All types of fourth-order squares, including the progressive ones, are very easy to construct. On the fifth-order level, ordinary squares do not yet present a problem, but the construction of progressive squares limited largely or entirely to common words is an art requiring considerable skill and patience.

For reasons unknown, a comprehensive collection of fifth-order progressive squares has never been published. Consequently, we are releasing our own collection of 20 such squares at this time, in the hope that readers will be encouraged to add to the collection with the fruits of their own labors. The squares have been alphabetized by first word, which is probably as good an arrangement as any other one:

\[
\begin{align*}
\text{ASCAP} & \quad \text{CACHE} & \quad \text{CAROM} & \quad \text{EGEST} \\
\text{SCAPE} & \quad \text{ACHES} & \quad \text{AROMA} & \quad \text{GESTE} \\
\text{CAPER} & \quad \text{CHESS} & \quad \text{ROMAN} & \quad \text{ESTER} \\
\text{APERS} & \quad \text{HESSE} & \quad \text{OMAN} & \quad \text{STERN} \\
\text{PERSE} & \quad \text{ESSEX} & \quad \text{MANIA} & \quad \text{TERN} \text{S}
\end{align*}
\]

**WORD WAYS**
Quite a bit of ingenuity has been invested in the construction of these squares, and many word categories and word sources have been tapped. On the whole, we are leaving it to readers to identify unfamiliar words, but a few examples of how to go about interpreting the unknown might be helpful. Therefore, we mention here that Rudolph E. RASPE was the author of the original Baron Munchausen stories; that MOSHE Dayan is the current Israeli Defense Minister; that SCLAV is a variant spelling of "Slav" sanctioned by the Funk & Wagnalls unabridged; that SCAPA is the first word in "Scapa Flow," a British naval base in the Orkney Islands; and that Gustav Hertz was a Nobel Prize winner in 1925.

Of the 20 squares shown above, the best ones are probably those beginning our own with the words CAROM, EGEST, FLORA, and LLAMA. However, even these squares contain a few less than common words (OMANI, GESTE, LORAN, and Massé). The problem of devising a fifth-order progressive square composed entirely of everyday words remains, for readers to attempt solving.

If we take the EGEST square and rewrite it in the fashion illustrated at the left, we realize that we have converted the square into a word stair.
the stairway in either or both directions. By changing the first word to AGEST ("thou agest rapidly, my son!"), it is immediately possible to increase the number of steps in our stairway from 5 to 8:

In a similar manner, it is possible for us to take the FLORA word square, transforming it into a second eight-step staircase:

The obvious question posed by these stairs is: how long can they be made? Readers are invited to experiment with that problem, and to submit their finest efforts to WORD WAYS for future publication.

A WHIMSY

Imagine that an actress clothed in utterly glistening white linen garments is about to step on stage to recite a poem in a dead language. To such an actress, we might say:

Alive linen, inert verse, enter!

What gives this greeting its memorable poignancy, its haunting aura of the eternal, is the fact that the five words comprising it may be arranged to form a true word square, reading both across and down, as illustrated to the right.

VOWEL ROTATION

Five common English words with an obvious letter relationship are LAST, LEST, LIST, LOST, and LUST. Unfortunately, modern English does not include a word LYST.

Can you, perchance, find a group of six such words all of which belong to modern English?

WORD WAYS