MAGGIE HAD A LITTLE PIGPEN

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Pigpen is a cipher system of geometric shapes. Of ancient origin, its current usage is essentially confined to members of various secret societies to the extent that it is often called the Freemason's Code. A non-masonic organisation which employed the pigpen cipher was The Knights of the Golden Circle, a white supremacist society which arose in America's postbellum South.

Pigpen is based upon a simple mnemonic which takes the form:

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A B C J K L
D E F M N O
G H I P Q R
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The geometric shape which houses each individual letter is then utilized as that letter. Word Ways famed scholastic shepherdess would begin her adventures thus:

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MARY HAD A LITTLE LAMB.
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One has only to recall the mnemonic to provide an immediate decipherment stating that MARY HAD A LITTLE LAMB.

My lady love - the adorable Maggie - and I have gone beyond the stage of merely employing pigpen as a convenient medium for our personal messages on picture postcards. Now, we add a touch of bedevilment by writing parts of our messages upside down, as an inverted letter immediately (with the solitary exceptions of the E and the N) assumes the appearance of its diametrically opposite "partner" (A = I, B = H, C = G, etc.). In these cryptic messages we might elect to invert individual letters or complete words to an unstated but discernible pattern. To demonstrate the effect, consider a three-by-three word square centred upon the ANI (an American Cuckoo which both builds its own nest and raises its own young), so providing an apt choice of word for an "upside down" treatment. After deciphering the pigpen characters one might assume that the square is the upper left one, but, completely inverted, it becomes the lower left one. It should be noted that, for example, HAD inverts as BIF if the complete word is turned upside down, whereas on the basis of a letter-by-letter inversion, HAD would appear as the meaningless BIF.
Similarly, a solitary letter inversion gives HAD the potential of BAD, HID or HAF (an obsolete form of HAVE) as its playful disguise.

Maggie and I respect the convention of a pattern in our inversion bedevilment. Thus, we might disguise an intended HAD as FLB, BAD, HID or HAF but never be illogical and produce a BIF.

However, we have discovered that the conventional placement of the alphabet is not ideal for prolific witty inversion. The pairings of such as S with V, T with U, and J with R are prodigal to say the least. But, what is the ideal arrangement of letters within the pigpen mnemonic for the greatest inversion fun?

Any reader who would care to explore this particular logological amusement has a choice of approaches. He or she might retain the conventional but highly restrictive alphabet and (say) regale us with the tale that MIRY HID A LATTLE LIMB on the basis of inversion of the second letter in each word, or else devise a far better placement of the letters within the mnemonic and produce a Marian masterpiece of maximum inversion. Equally challenging is the discovery of the ultimate size of an inverted pigpen square of both the conventional and the revised placement arrangement of the letters (pigs) within their pens. Can you do it? We inversionists await your research with interest.

HYMN TO THE STATES

In Answers and Solutions in this Issue, David Morice exhibits a paragraph which incorporates the US Post Office statename abbreviations. Some time ago, Philip Cohen sent in the following poem by John Updike in the November 1986 issue of Harpers magazine. It originally appeared in the September 28, 1986 issue of the Reading (Pa.) Eagle.

aMERICA, you caTNip bIN, OR DEen of uNjury, iNVest your HINDMOst FLimFLAMS in PAID fAREs to ALbaNY.

aCT CockY, bUT beWAIL the triAls of crAzed, uNHAPPy MAin. diSDain arMTwisting; trickS and Wiles uNMAKE a GAMIng plan.

OH, shoWY land of SCHEmes uNBORN (huMDinger uNCle, be adVIsed), i very VAGuely want to hyMN your hardCore, PReSSurized, loWValue rows of OK corn from TX to VT.