## SCHERMACK PERFINS Warren Travell

There is one kind of postally-used perfins which is in a class by itself -as it is quite different from all others both in its origin and in the style of its patterns. These are the perfins which were perforated by the Schermack Company at the same time they cut the side slots which distinguish their output from that of other companies.

The Schermack patterns are derived from a square of three holes on a side-the complete square having nine holes. By the omission of one or more holes, A large number of different patterns may be made. And this gives rise to an interesting mathematical problem in "combina-tions"-how many of these Scher-
mack patterns are possible with the three-hole-square, counting only those which have $4,5,6,7,8$, and 9 holes as none have been reported having only 1,2 , or 3 holes. Then when the total number has been determined, there should be deducted all those which duplicate others in appearance. For instance, numbering the holes downward beginning at the upper left corner, the pattern having holes $1,2,3,4,5,6$ is identical in appearance with pattern $4,5,6,7,8,9$, As the holes are perforated at the same time the slots are cut, they are all properly centered and face up-there are never any inverts, ofverts, diagonals, sideways or double punching.

One perfin has shown up that is derived from a square having four holes on each side. This was used by the Schermack Company on their own stamps and had holes at 1, 2, $3,4,5,8,9,12,13,14,15,16-$ in other words forming a hollow square with four on each side.

The writer either has in his collection or has received reports regarding 18 of these Schermack perfins. These are:
$1,2,3,4,5,6,7,8,9$
1, 2, 3, 4, 5, 7
$1,2,3,4,5,7,8$,
1, 2, 3, 4, 5, 6, 9
1, 2, 3, 6, 8, 9
1, 2, 3, 6, 9
$1,2,3,6,7,8,9$
1, 3, 4, 7
1, 3, 7, 9
$1,3,4,5,6,7,9$
$1,4,5,7,8,9$
$1,4,7,8,9$
$2,3,4,5,6,7,8$
$2,3,4,5,6,8,9$
2, 4, 6, 8
$3,5,6,7,8,9$
$3,6,7,8,9$
$1,2,3,5,8,9,12,13,14,15,16$
Anyone havin gadditional patterns kindly report-also identifications are greatly to be desired.

WANTED-Capital to expand my printing business. Hallock Card, Otselic, N. Y.

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When sending perfins on approval or for a quotation see that a letter accompanies them or arives before as I assume when a packet arrives from a member it is for general distribution unless otherwise stated. All such are put in a box on arrival and used in the mailings.-H. Card.

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\begin{array}{ll}
1,2,3,4,5,6,7,8,9 & 1,3,4,5,6,7,9 \\
1,2,3,4,5,7 & 1,4,5,7,8,9 \\
1,2,3,4,5,7,8 & 1,4,7,8,9 \\
1,2,3,4,5,6,9 & 2,3,4,5,6,7,8 \\
1,2,3,5,6,8,9 & 2,3,4,5,6,8,9 \\
1,2,3,6,9 & 2,4,6,8 \\
1,2,3,6,7,8,9 & 3,5,6,7,8,9 \\
1,3,4,7 & 3,6,7,8,9 \\
1,3,7,9 & 1,2,3,4,5,8,9,12,13,14,15,16
\end{array}
$$

Anyone haring additional pattezns kindiy report.- 31 so, identifications are greatly to be desired.

