

ROWLEY, CHARLES, and TURNER, JAMES.—“Improvements

“ in the manufacture of perforated metal buttons.” The button consists of one thickness of metal perforated with three or four holes; the improvement consists in causing the edges round the holes to be compressed by means of dies, so that each hole will appear “as if a ring were let into the button;” by this means the thread will be less liable to be cut, as it will be “supported by the rounded surfaces so raised.”

The button blank being “shaped in proper shaping dies” and perforated is submitted to dies of the following construction:—The upper die carries a plug which passes through each hole, fills up the interior thereof, and enters a recess formed in the lower die. “The compressing of the metal “around the holes into the ring-like form is caused by the sunk “parts” of the upper and lower die. All the holes may be completed at one operation “by a suitable formation of dies.”

The perforations may be effected either by cutting or by punching “so as to form a short projection in one side,” and

the edges of the holes so forced through "may be condensed  
" into a ring-form by the tools or dies above described."

[Printed, 6d. Drawing. See Repertory of Arts, vol. 2 (*enlarged series*),  
p. 23.]