MYSTERY HOLTZAPFFEL ROSE CHUCK?



The Foundation Plate screws onto the lathe mandrel and rotates with it. The front plate of the chuck is a slide which oscillates under the resistance of 2 springs (now missing) and, so far as I can tell, the number and extent of the oscillations would be governed by some form of rosette (now missing) that would have been fixed to the face of the headstock casting behind the Chuck with a rubber connected to the steel plate protruding from one end. As the Chuck is rotated, the rubber, under pressure of the springs would follow the rosette profile causing the slide to oscillate and generate a rose-engine pattern without the need either for a rocking headstock or a sliding slide-rest.





The nosewheel has 144 divisions and, the ratchet mechanism indicates that this chuck was made during the earlier period before the worm-and-wheel adjustment became common. To the left of the pictures may be seen two steel screws whose ends are hooked to hold the ends of the 2 (missing) springs. To the right of the pictures may be seen a further 2 steel screws, again with hooked ends; and three different positions in order to vary the spring pressure as desired.







Having given this matter a little more thought I have now come to the conclusion that my explanation is faulty.

As the chuck rotates, so the slide will move progressively from horizontal to vertical twice in every rotation. This means that the rose pattern will be generated only in the horizontal positions, fading in and out as the chuck moves around from and to the vertical; and when at the vertical positions the effect of the cutter will be neutralised. A second problem also occurs to me: that when the rubber comes around to the front of the lathe (facing the operator) the pattern will be a copy of the rosette profile, but when the rubber goes around to the back of the lathe the cutter, being on the front, will cut the reverse of the rosette profile.

So, we still have a mystery, unless you can tell me something different.

If anyone recognizes or understands anything at all about the function of this extremely rare Chuck, would you please contact me by email to: *ornamental.turning*[at]*talktalk.net* using (a) in place of [at]

