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(54) Stretch forming metal bodies with polymeric internal mandrels

(57) A hollow metal body is shaped by a process including simultaneous stretching and bending. The body is stretched longitudinally by pulling end portions in opposite directions with sufficient force to exceed an elastic limit and to initiate elongation through plastic deformation. While the body is being stretched longitu-

dinally, it is bent between its end portions transversely of the direction of pulling. Solid polymeric first and second mandrels are inserted into end portions of the body to prevent collapse during bending.

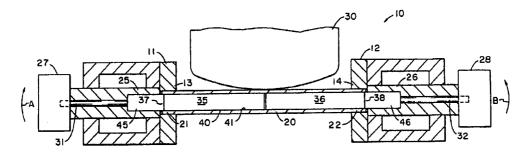


FIG. I



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