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(57) Abstract :

The present invention provides a Variable Orthodontic Brace Locator (100) which is an advanced orthodontic tool designed to enhance the accuracy, efficiency, and comfort of brace placement during dental treatments. It features two primary arms, the upper arm (101) and lower arm (102), made of SS304 stainless steel and connected via a hinge mechanism (104) with a hinge pin (104a), allowing smooth rotation. The probe tip set (105), consisting of a teeth rest probe (105a) and location marking probe (105b), aids in precise positioning within the bracket slots. The device incorporates a roller mechanism (103), with a screw (103a) and roller nut (103b), enabling fine-tuned adjustments for accurate brace placement. This ergonomic and sterilizable design ensures durability and hygiene, while the standardized measurement system ensures consistent performance across various orthodontic cases, reducing adjustment time and improving overall treatment efficiency for both orthodontists and patients.

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