DIAGRAMS OF MACHINE TOOLS

Kinematic diagrams of a lathe:

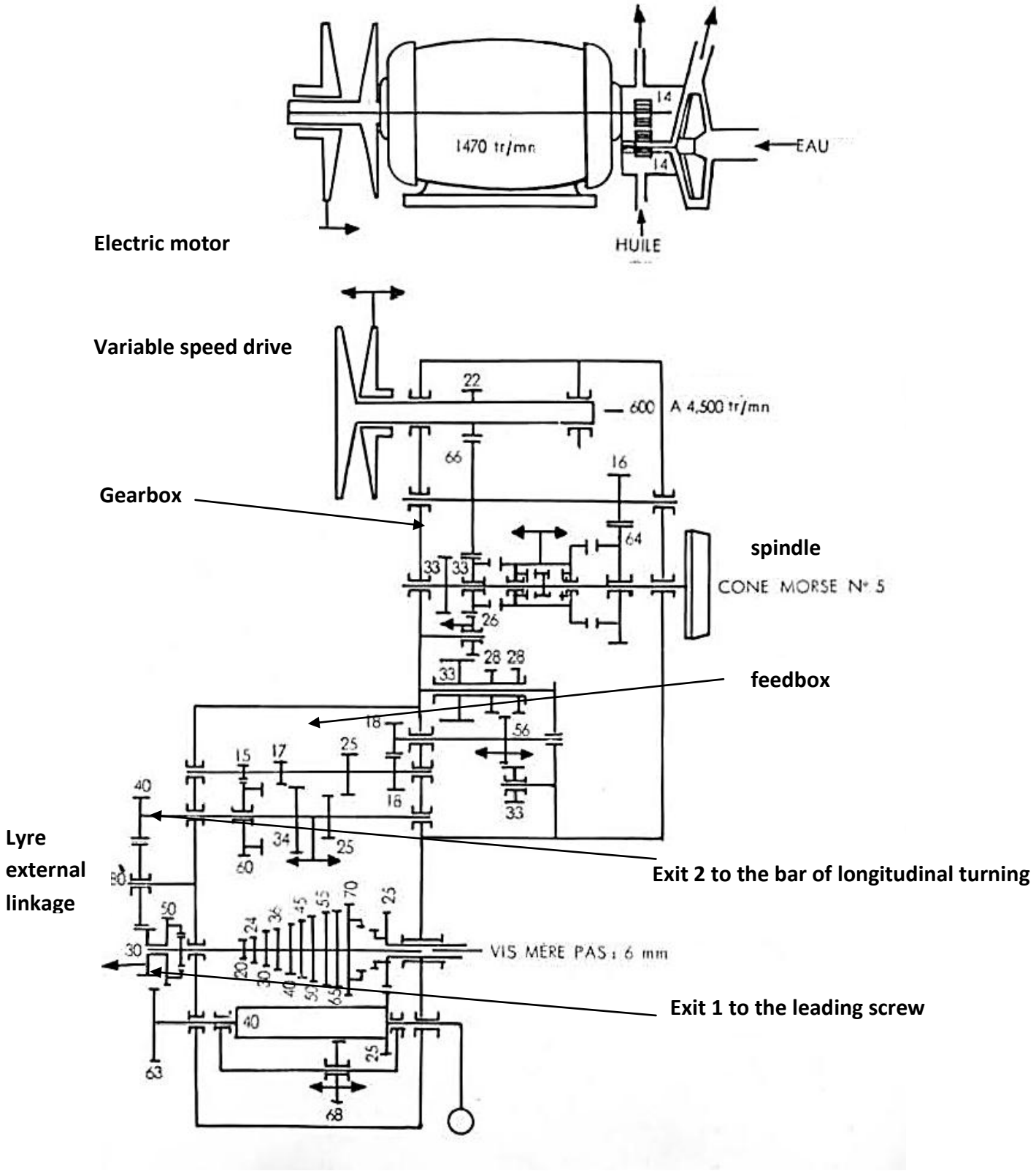


Figure III.22. Cutout diagrams of a lathe

Fixed doll and training of trolleys

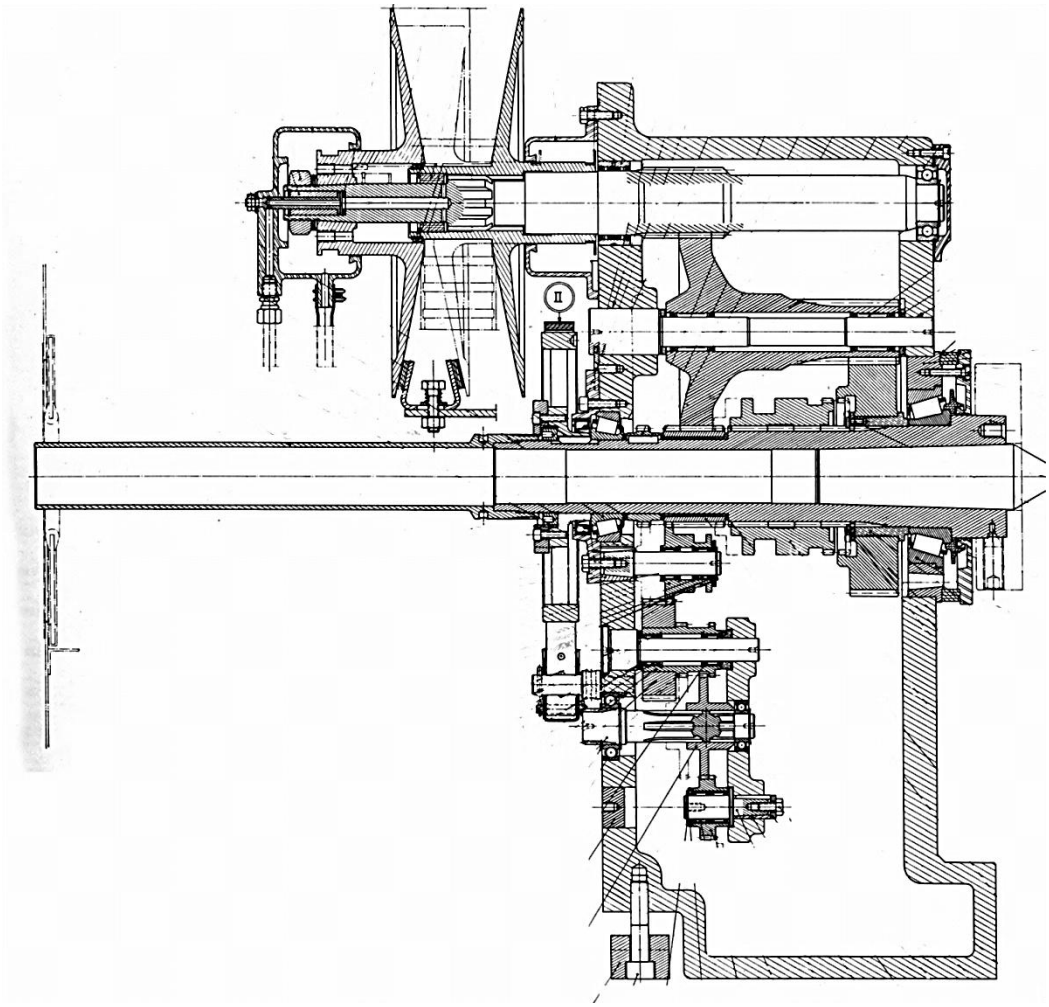
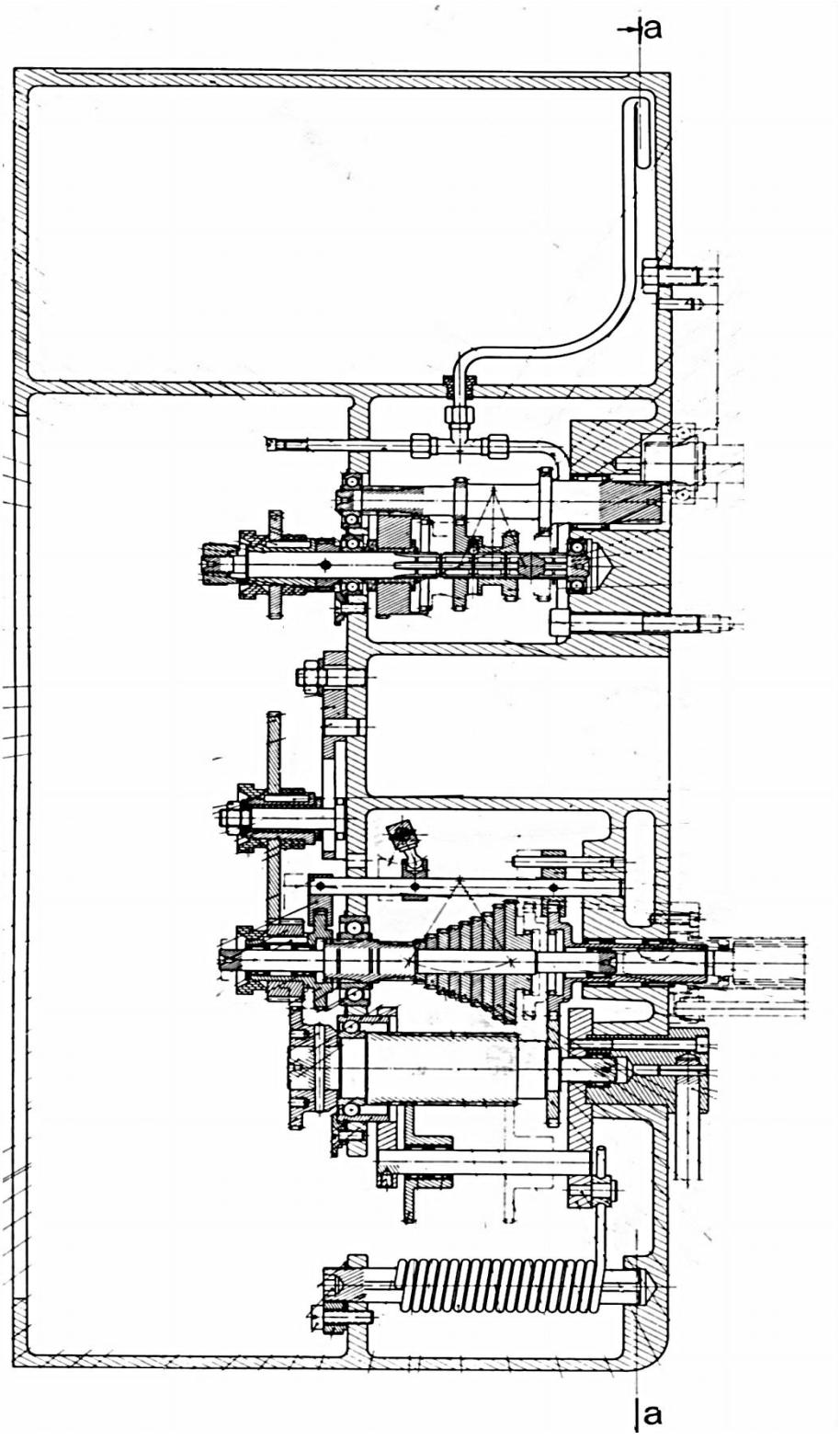


Figure III.23. Cut of the fixed doll.



FigureIII.24 . Feed box cutting

III.1.7.2. Trolleys control:

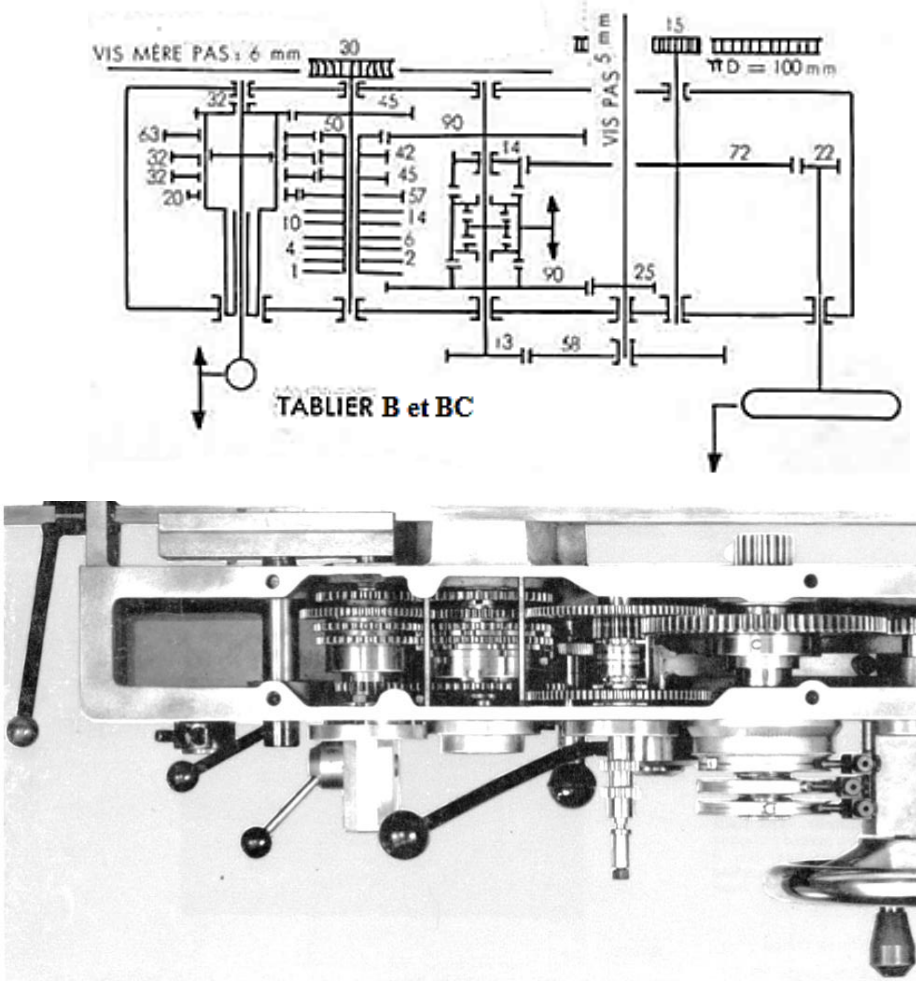


Figure III.25 : Longitudinal Dolly Cut and Kinematic Diagrams

Kinematic diagrams of a drill

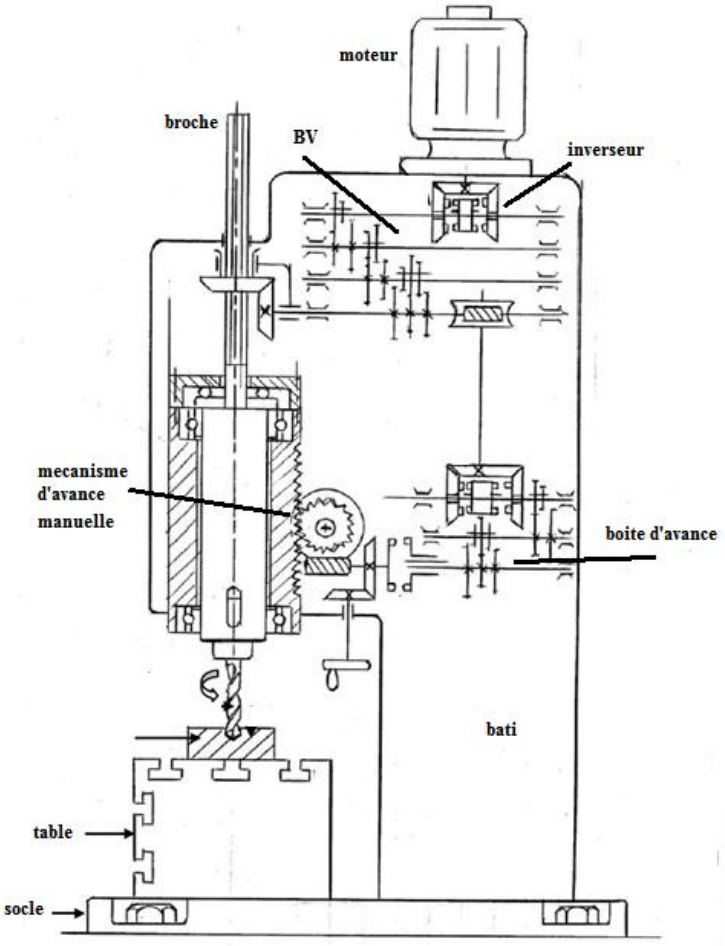


Figure III.36 : kinematic diagrams of a drill

Figure III.37. Kinematic diagrams of a drill feed mechanism

Kinematic diagrams of a milling machine:

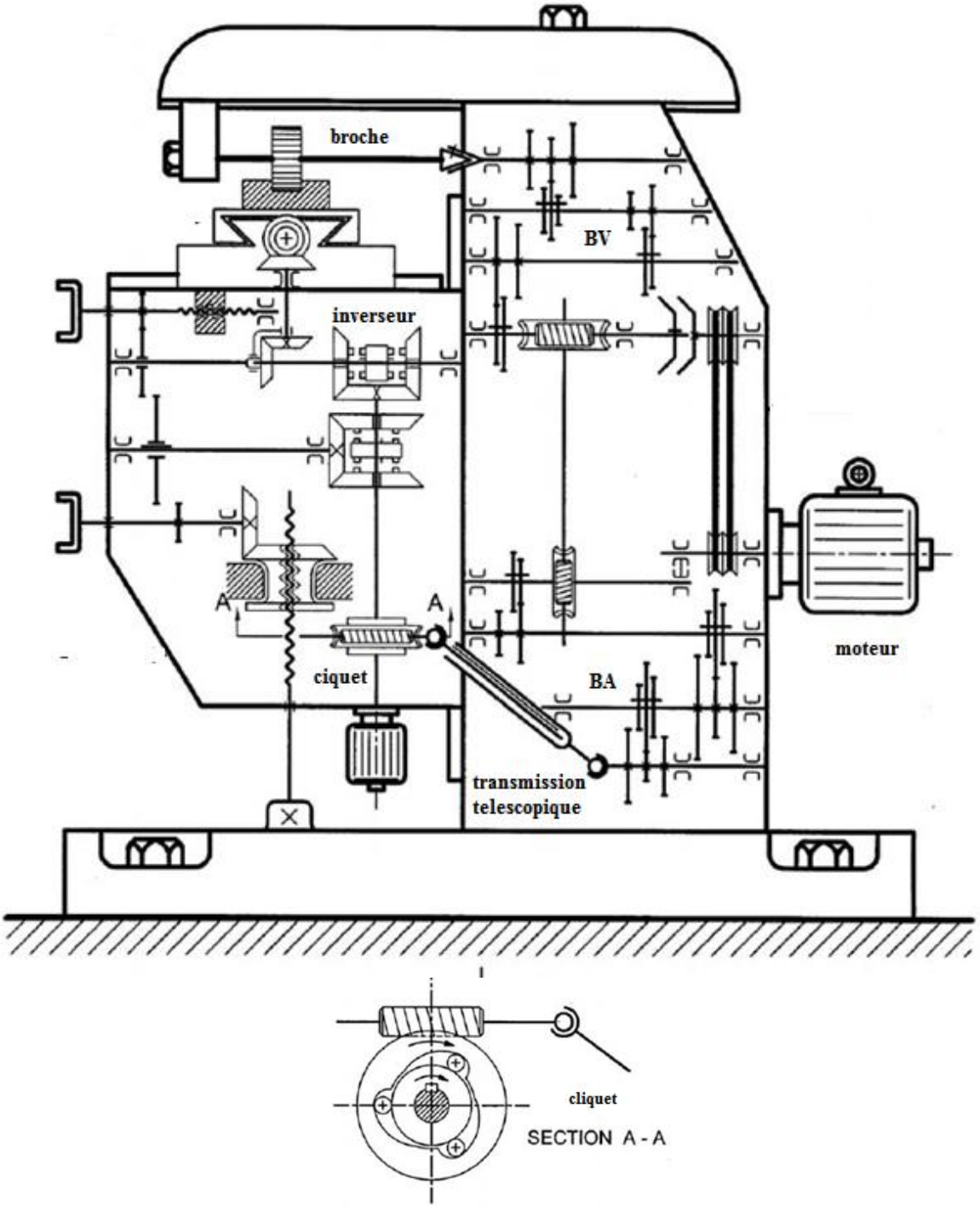


Figure III.57 : kinematic diagrams of a horizontal milling machine.

Kinematic diagrams of shaper:

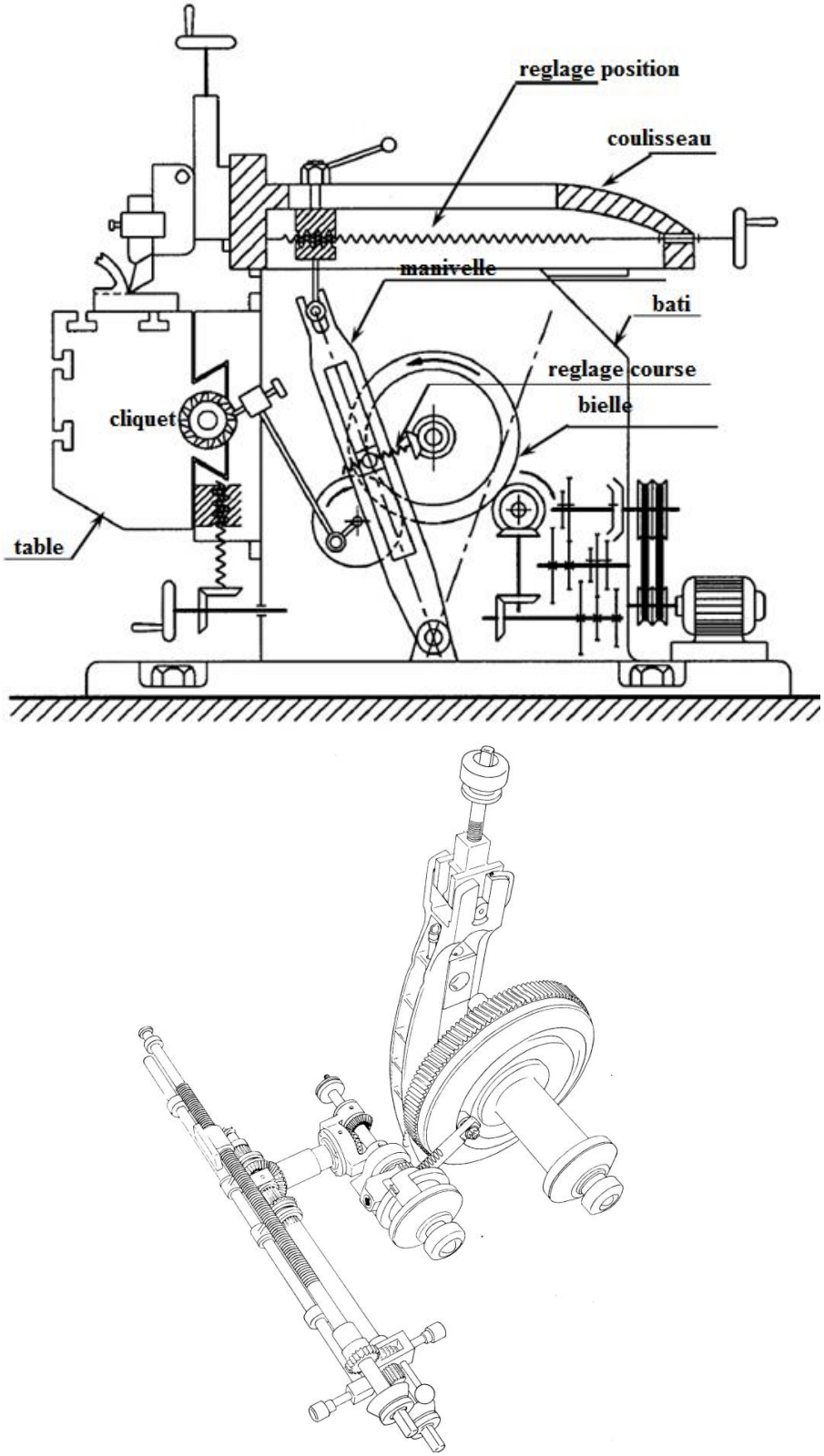


Figure III.64. Kinematic diagrams of a shaper and its feed mechanism.

Kinematic diagrams of a planer:

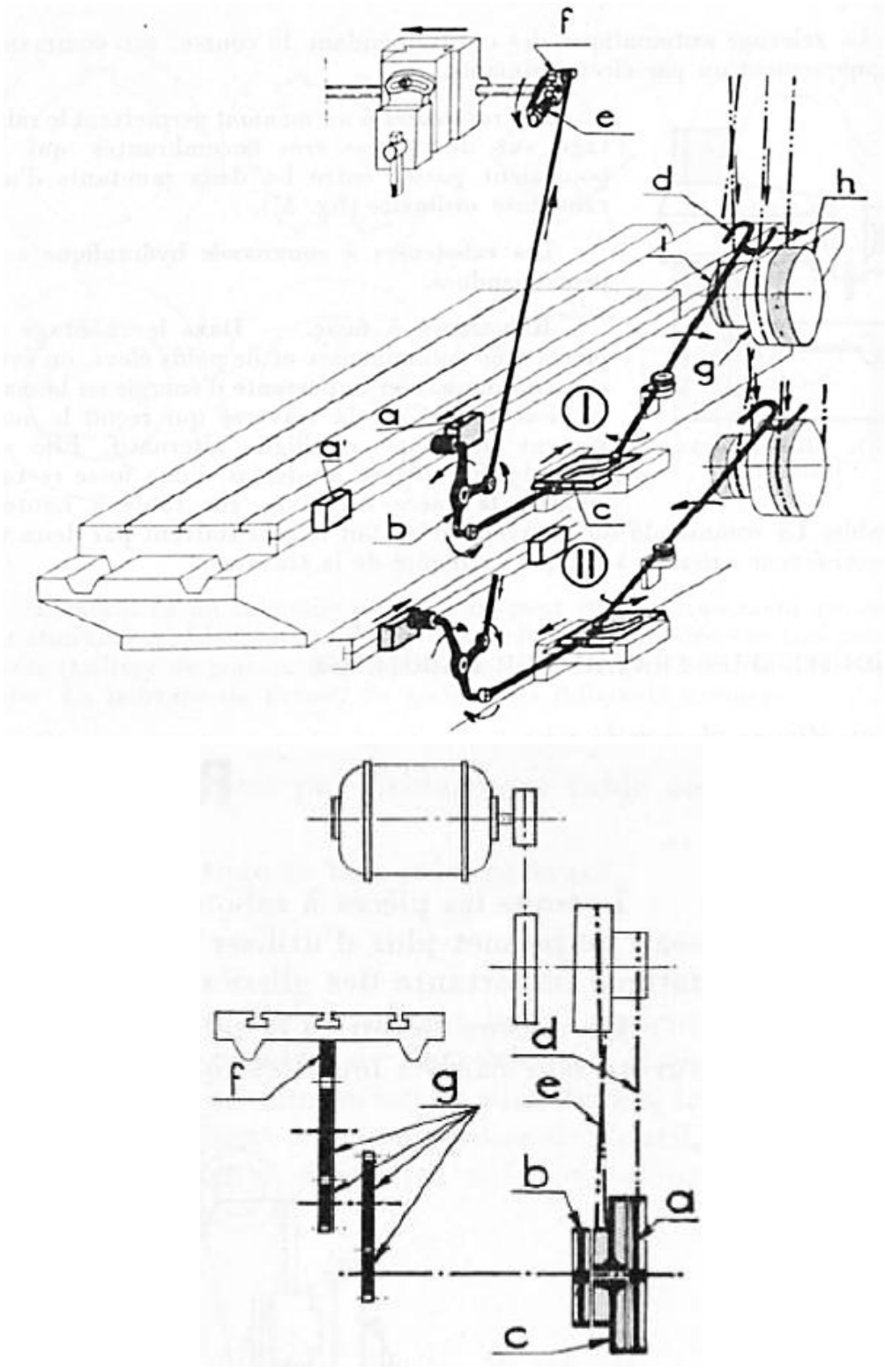
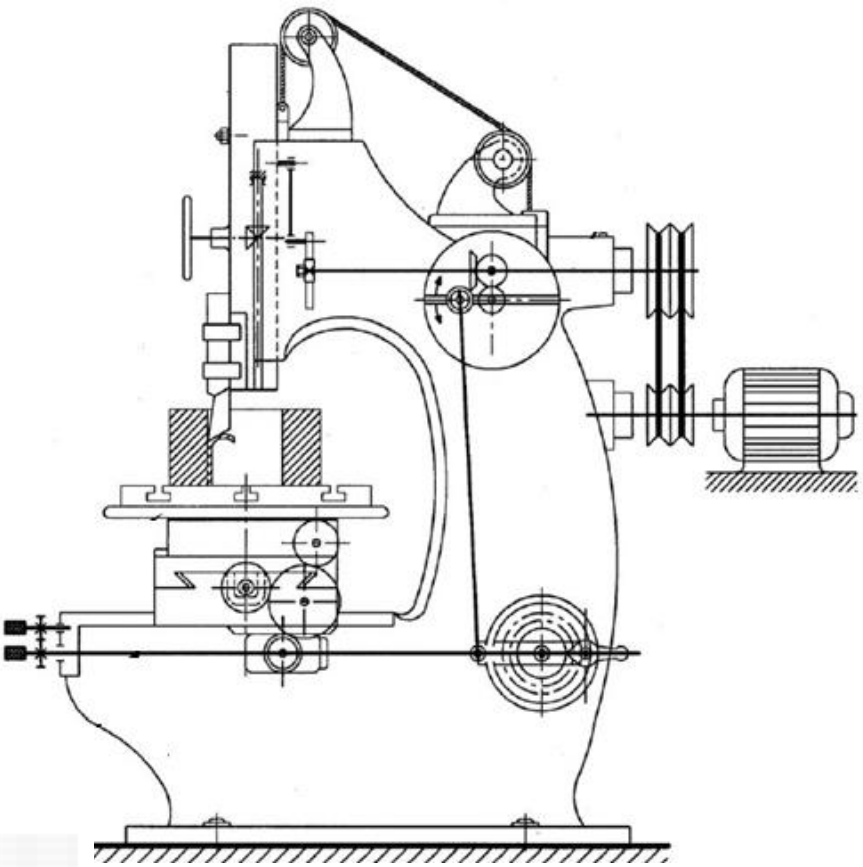
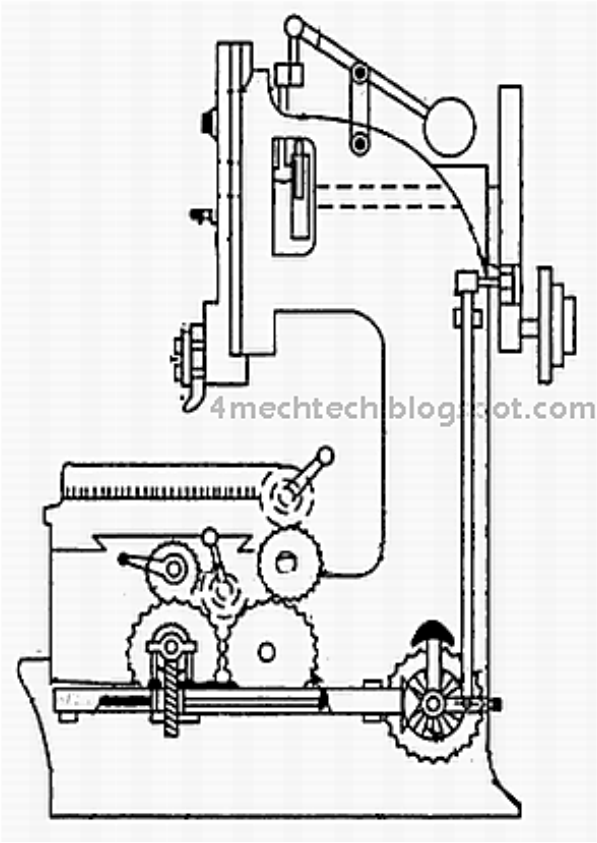
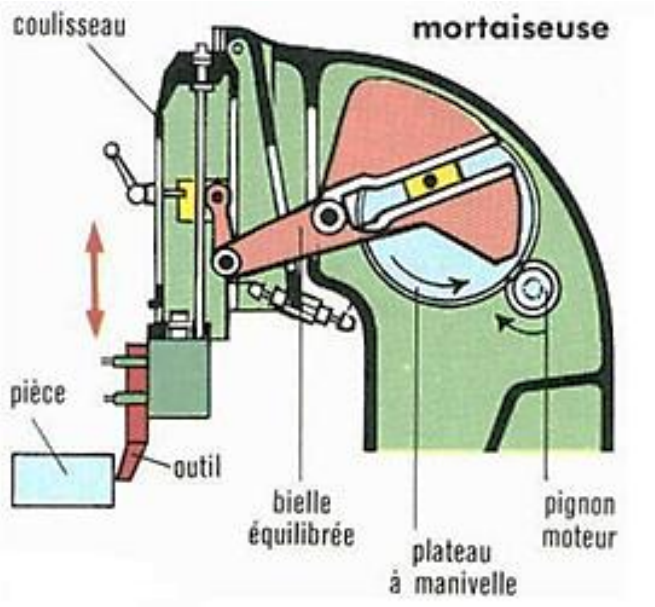


Figure VII-68: planer kinematic chain

Kinematic diagrams of a slotter:







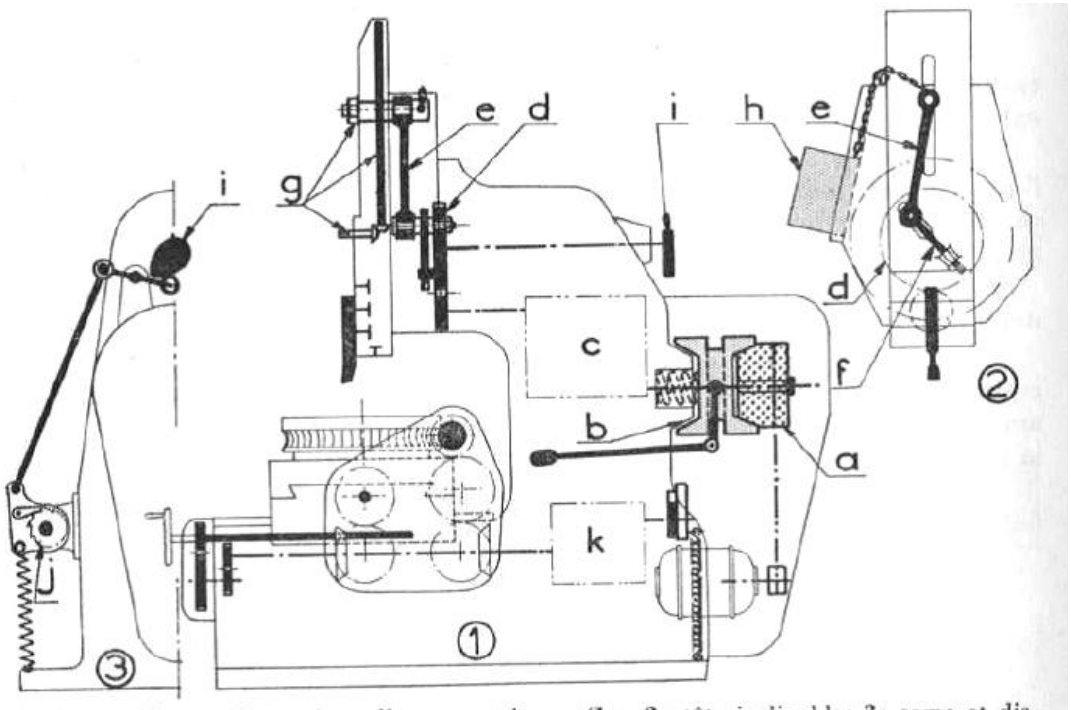
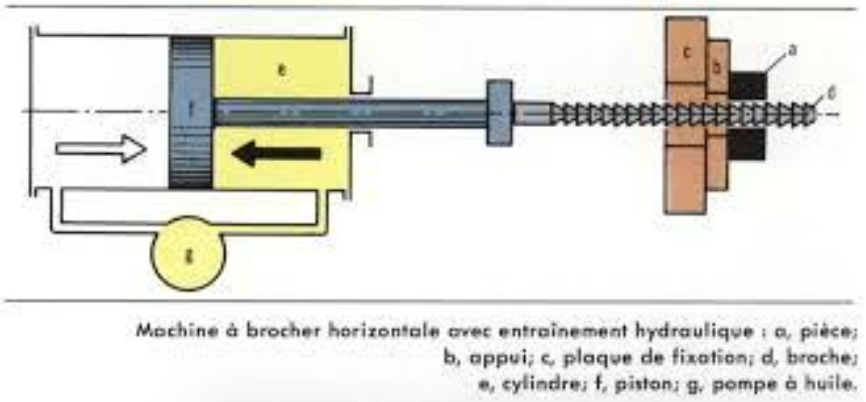


Fig. 41. — Chaîne cinématique d'une mortaiseuse (**1**,; **2** : tête inclinable; **3** : came et dispositif de commande d'avance. *a* : embrayage à friction, *b* : cône de freinage après débrayage *c* : boîte de vitesses, *d* : plateau manivelle, *e* : bielle, *f* : réglage de longueur de course, *g* : réglage de position du porte-outil, *h* : contrepoids d'équilibrage, *i* : came, *j* : rochet de commande d'avance, *k* : boîte de variation et d'inversion d'avance.

Figure III.72. Kinematic diagrams of a slotter.

broaching machines:



Machine à brocher horizontale avec entraînement hydraulique : a, pièce; b, appui; c, plaque de fixation; d, broche; e, cylindre; f, piston; g, pompe à huile.

Figure III.74: Principle of Broaching.

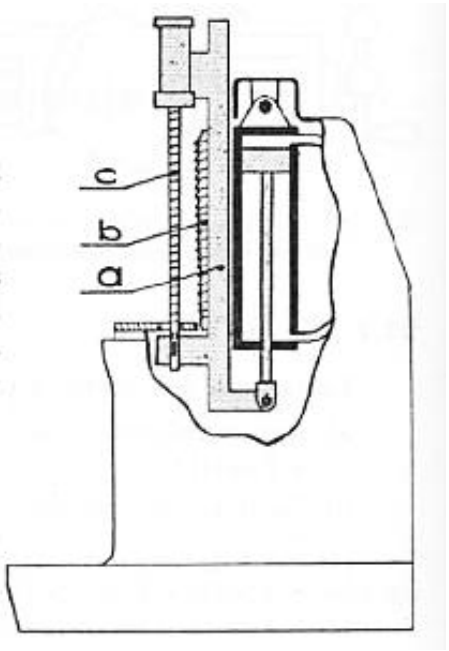


Figure III. 8 : Vertical broaching machine.

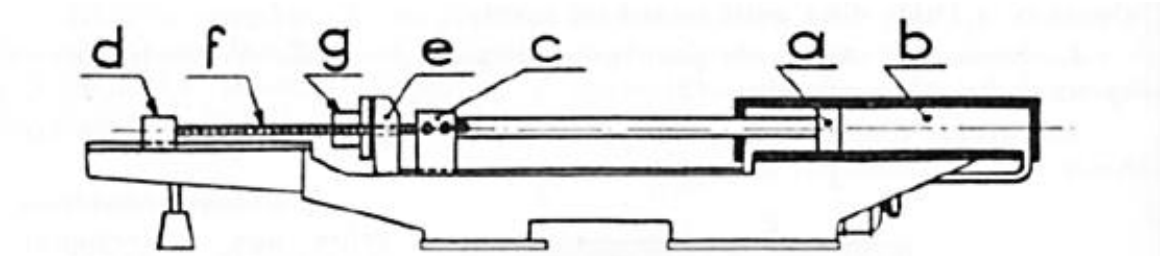


Fig. 44. — Brocheuse horizontale hydraulique.
a: piston, *b:* cylindre, *c:* tête d'attelage et de traction, *d:* lunette support de broche, *e:* plateau porte-pièce, *f:* broche, *g:* pièce.

Figure III.79. Horizontal broaching.