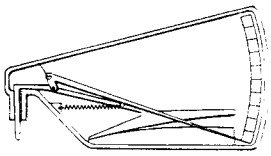
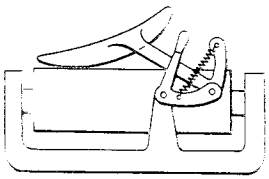
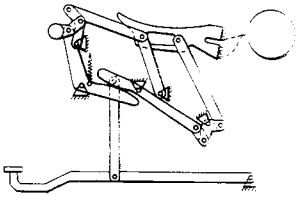
Roll-Cam Devices



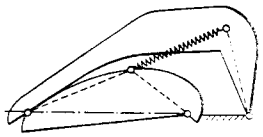
Sensitive contact gage uses a rocking pair to decrease the effect of friction and increase the accuracy.



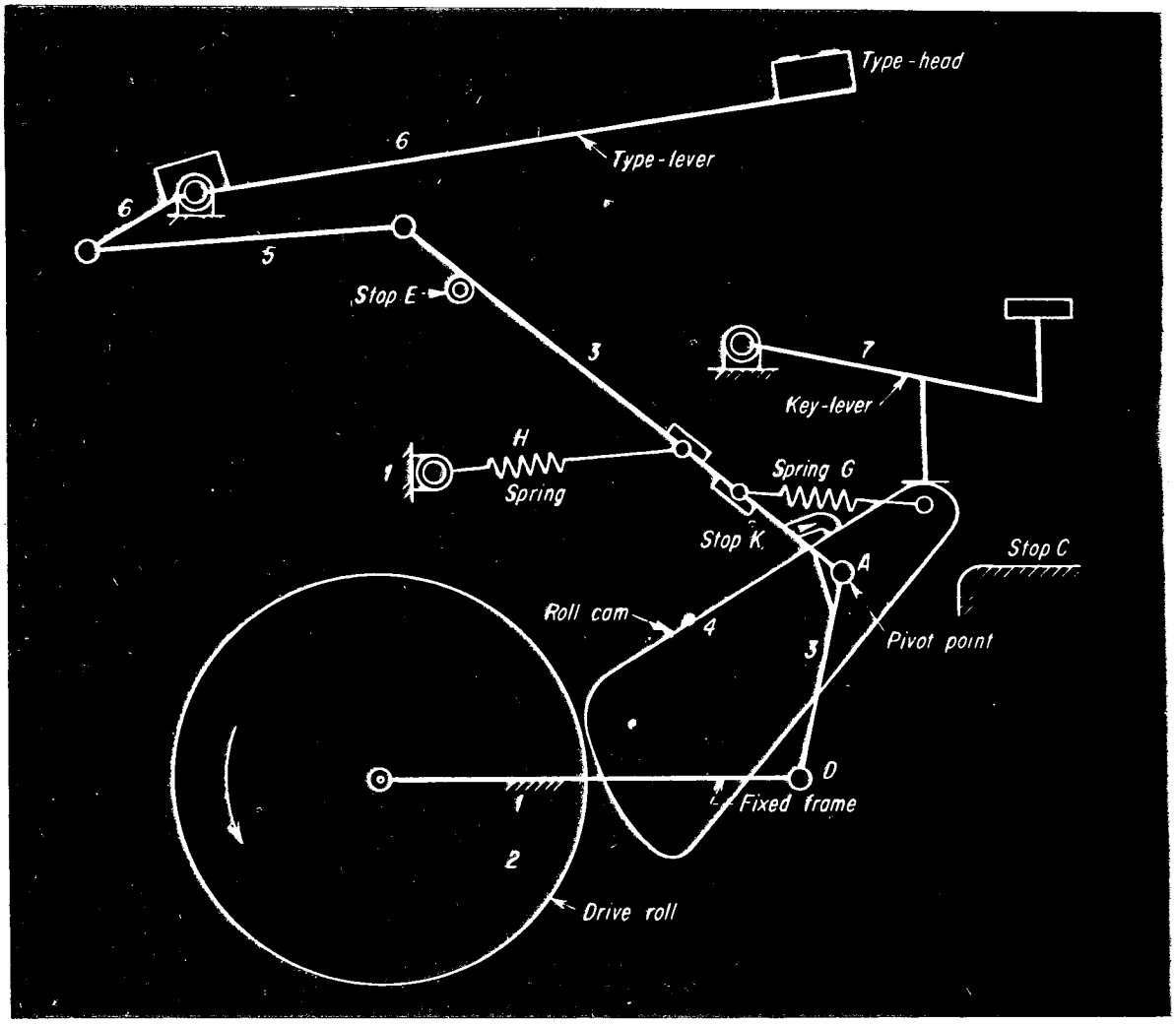
Variable electrical resistor has a rocking surface instead of a sliding brush to reduce wear with smooth operation.



Typewriter linkage has a rocking pair that actuates upper or lower case letters with smoother, quieter action.



Rocking mechanism derived from 4-bar linkage has constant spring length which transmits no force to bearing.



2 Electric-typewriter mechanism . . .
uses roll cam for motion amplification. Here, path of pivot point on roll cam is curvilinear.

Roll cams are also employed in IBM electric typewriters, Fig. 2. Here the cam is triggered by a touch of the typist's finger to power the type heads.

The roll is driven by an electric motor at constant speed. Cycle begins when the typist depresses the key lever which rotates the cam into contact with the drive roll. The cam is connected to link 3 at pin point *A*. Rotation of drive roll makes link 3 rotate clockwise, causing link 6 to rotate (via link 5) until the type head contacts the platen (not shown).

At end of the cycle, the cam strikes stop C and loses contact with drive roll. Spring G then returns the cam to its position against the stop *K*.

During this time, while cam and drive are disengaged, the type head continues to approach the platen because of kinetic energy stored in type lever (link 6). After type head strikes platen, spring *H* returns the linkage to the home position where link 3 contacts stop *E*.