

12 **EUROPEAN PATENT APPLICATION**

21 Application number: 89301977.8

51 Int. Cl.⁵: **E05B 15/04**

22 Date of filing: 28.02.89

30 Priority: 09.08.88 GB 8818859

43 Date of publication of application:
14.02.90 Bulletin 90/07

84 Designated Contracting States:
DE ES FR GB GR IT

88 Date of deferred publication of the search report:
17.10.90 Bulletin 90/42

71 Applicant: **Middleton, Colin Sidney**
Pilgrims Field Way Compton Down
Nr. Winchester Hampshire, SO21 2AL(GB)

72 Inventor: **Middleton, Colin Sidney**
Pilgrims Field Way Compton Down
Nr. Winchester Hampshire, SO21 2AL(GB)

74 Representative: **Prentice, Raymond Roy**
R.R. Prentice & Co. The Hop Exchange 24
Southwark Street
London SE1 1TY(GB)

54 **Improvements in mortice latches.**

57 A mortice latch which largely overcomes the problems of wear and breakdown in operation comprises a casing consisting of a top case (2) and a bottom case (1); a latch bolt assembly reciprocally mounted in the casing and comprising a bolt head (7), a bolt lathe (8) and a bolt end-stop (9); a latch bolt follower (23), pivotally mounted in the casing, and a return spring (33). The follower (23) has a first curved arm (25) provided at its end with an arcuate surface (26) which is engageable with the latch bolt end-stop (9) and a second curved arm (28) which is provided with a cylindrical socket (29). A roller (31) is freely pivotally mounted in the socket (29) and the return spring (33) is mounted on a shaft (32) which extends from the roller (31). The shaft (32) extends through an aperture in a strip (17) projecting from the bottom case (1) and one end of the spring (33), which takes the form of a coil spring, bears against the strip (17) while the other end of the spring bears against a stop (34) on the shaft (32). The engagement of the roller (31) in the socket (29) of the follower provides a ball and socket type action and is such that very little wear takes place and any that does is fully compensated. The latch bolt can still be operated even in the event of failure of the return spring (33). A dead bolt assembly may also be fitted to the mortice latch if desired.

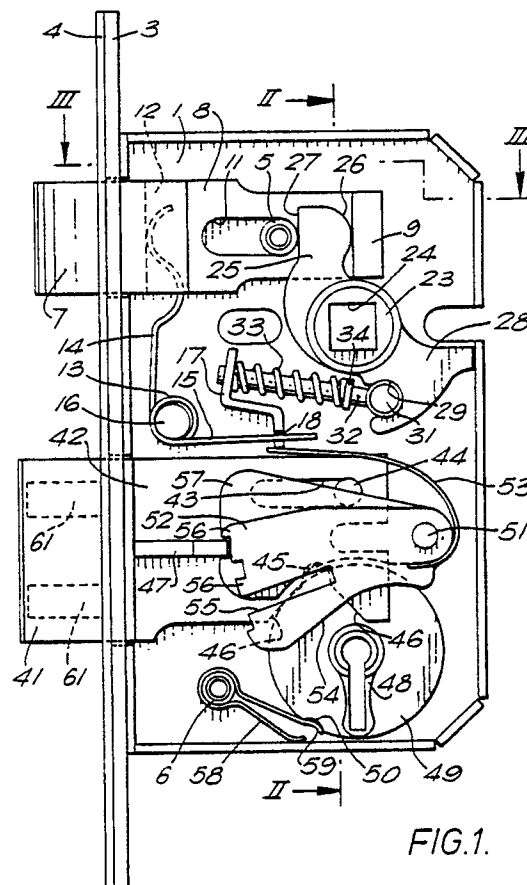


FIG.1.



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 89 30 1977

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	FR-A- 772 055 (BRICARD) * Complete document *	1-9	E 05 B 15/04
A	DE-C- 179 116 (RENFERT) * Figure 3 *	10-13	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			E 05 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27-07-1990	Examiner VAN BOGAERT J.A.M.M.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			