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Advanced Armament Corporation ()

.22LR 9,0

MAE Kilwell Whisper.22LR ()

9,0

9,0

5,6 ()

Advanced Armament Corporation () .22LR 9,0

MAE Kilwell Whisper.22LR ()

5,6 () 9,0

9,0

The paper deals with information about firearms sound suppressors using elastic deformable elements, significantly springs.

The results of analysis of their designs are presented and three groups of sound suppressors are classified by concepts and operations of the springs used. The basic problems to be solved in designing such sound suppressors are specified. The possible sources of the results for multi-mass designs with springs are examined. Current sound suppressors produced by Advanced Armament Corporation (USA) are presented for .22LR and 9.0 mm caliber firearm.

The most popular MAE Kilwell Whisper .22LR sound suppressor with movable spring-actuated baffles (New Zealand) is examined. The authors developed such design for sound suppressors suitable for 5.6mm (two modifications) and 9.0 mm caliber firearm. Special features of the development work of the sound suppressor design for 9.0 mm caliber firearm are presented.

Conclusions are made for the designs developed and lines for continuing these works are proposed.

[1].

» [2].

(),

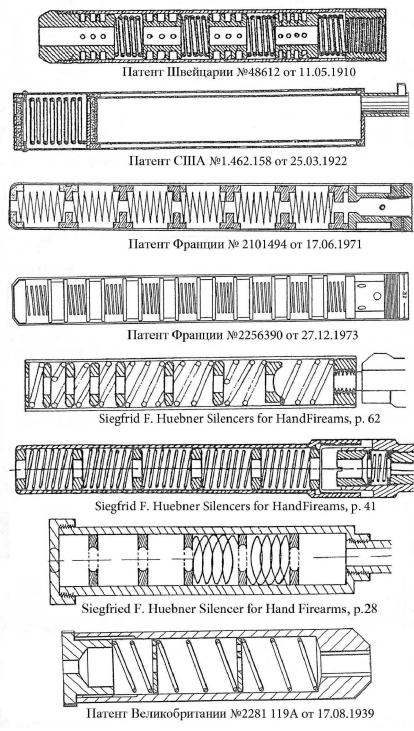
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(. 1, 2);
(. 3, 4);

«

»

(. 5).

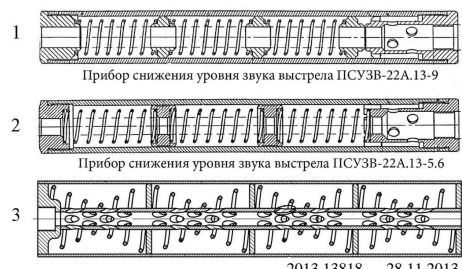


. 1 – 5

48612 11.05.1910
(. 1.1).

(
(« »),

. 1

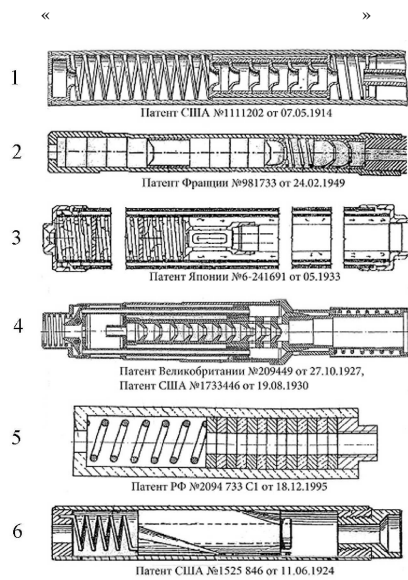


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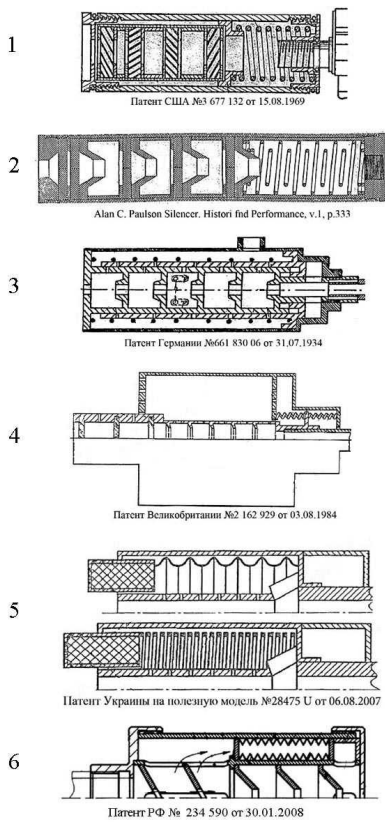
[3, 4].

. 2

4



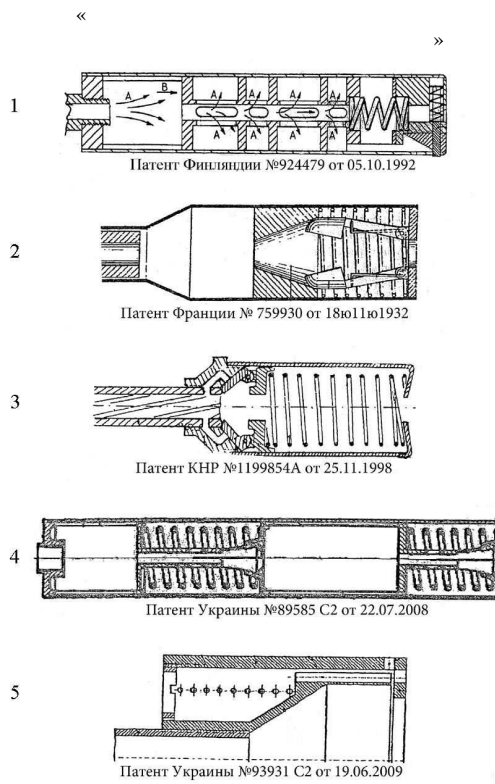
. 3



. 4

(. 1.6 [3, 4])

(. 1.6 [3, 4]),

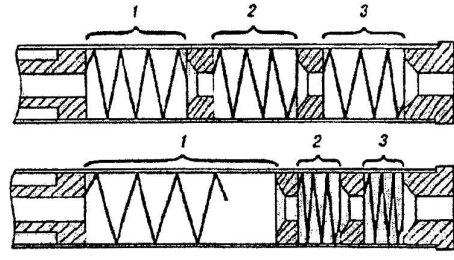


. 5

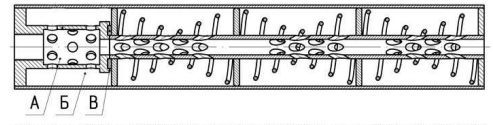
— ;
 — ,
 — () ;

[5]

()
 (.6 [5]).



.6



.7

(.7) [6].

[7],

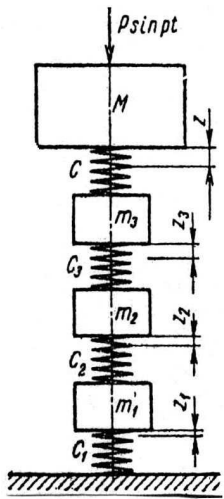
83,3%,

28%.

40 – 49%.

(77,8%).

(65,3 72%).



. 8

m_2, m_3 $M,$

) [8].

(. 8 [8])

[9].

[10],

() ,

$d -$) ,

() ,

() [1, 11].

$$H_{np} = d [1, 11].$$

[12, 13].

[12].

.22LR 9 .
vanced Armament Corporation - 2013 [14] Ad-

.22LR ELEMENT 2™, PRODIGY™ PILOT 2™.
ELEMENT2™
[15] (. . 9)

(. . 10) [16].



.9



.10

Prodigy

(. . 11) [17, 18].



.11



.12

PILOT 2
ELEMENT 2 (. . 12).

9

EVOLUTION-9

Glock, Hekler&Koch, Sig Sauer [20].
TI-RANT

2).
ELEMENT 2 PILOT 2 [21].

.22LR 9

.22LR MAE

Kilwell Whisper .22LR

. 13,

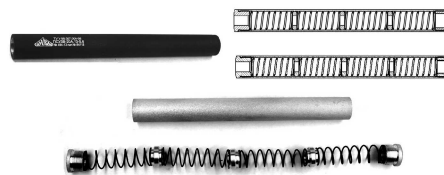
[22].

.22LR: Anschütz, Ceska

Zbrojovka, Sako, Savage



. 13 MAE Kilwell Whisper
.22LR



. 14 -20 .13-5,6

: .22 Long Rifle ().
: 6061.
: 25 136
: 123
: 1/2x20UNF. (): 13
: 75
: .22LR ()" "; Sub-sonic.

: 5,6
: Al Ti
: 20 : 198
: 190
: 14x1, 1/2-20.
: 80
: 5,6
: .5,6 , Savage 93.

Kilwell Whisper

: Ceska Zbrojovka, Sako, Savage, Anschütz.

. 2.3, . 4.5, . 5.4, . 5.5).

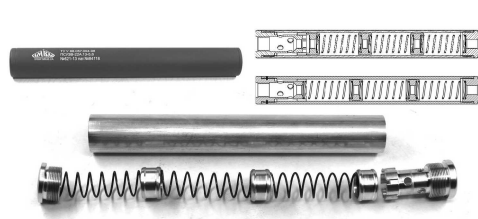
(. 2.1, . 2.2,

5,6 ()

9,0

. 14, 15 16.

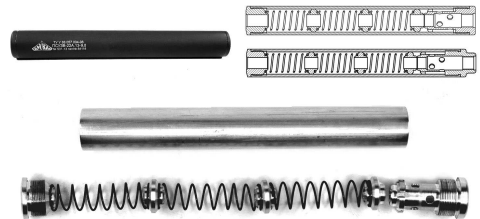
9



.15 -22 .13-5,6

:5,6
: Al , Ti
: 25 : 200
: 190 : 14x1, 1/2-20.
: 140 : 5,6

Savage 64, Savage 93



.16 -22 .13-9,0

:9,0
: Al , Ti
: 25 : 208
: 199 ()
: 187 (196)
: 140 : 12x1
: 9,0

5,6

MAE

Kilwell Whisper .22LR.

9,0



.17

.17

.18.

.17



.18

9,0 :

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12.05.14,
12.05.14