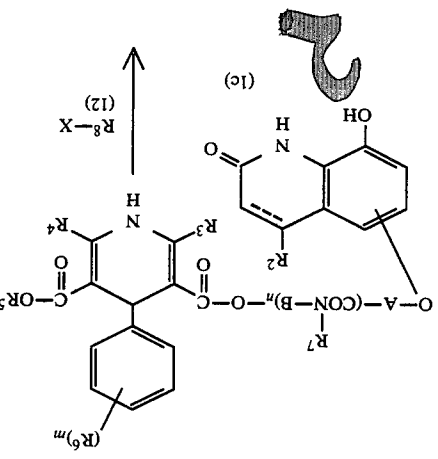


$$\cos \beta^* = \frac{K_2 - n \frac{r'}{v'}}{K_1^2 + \left(K_2 - n \frac{r'}{v'} \right)^2 + K_3^2}$$

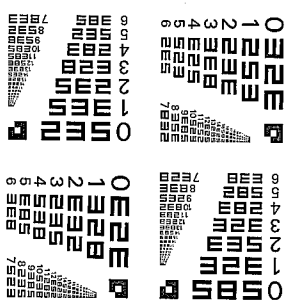
Carbostyryl derivative or a pharmaceutically acceptable acid addition salt thereof, having excellent platelet aggregation inhibitory effect, calcium antagonism, hypotensive effect and phosphodiesterase inhibitory effect are useful as prophylactic or treating agents for thrombosis, circulation improving agents for coronary blood flow such as coronary vasodilators, hypotensive agents and phosphodiesterase inhibitors. Furthermore, the carbostyryl derivatives are weak in heart rate increasing activity, and the carbostyryl derivatives are useful

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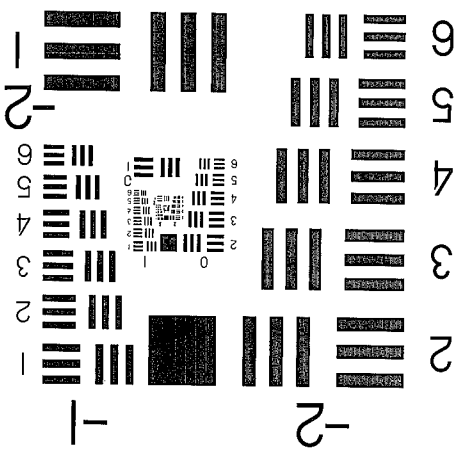


$$v_{ref}(t) = K r \delta \left(1 - \frac{2L}{v_w} \right) + K (1 - r^2) e^{-2\alpha s ds}$$

$$(K_1 x + K_2 y + K_3 z + T) + n(K_1 x + K_2 y + K_3 z + T) = 0$$

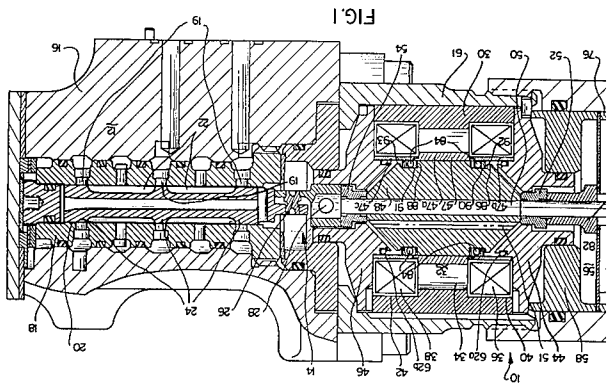
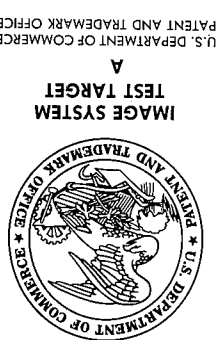
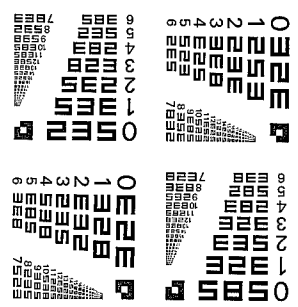
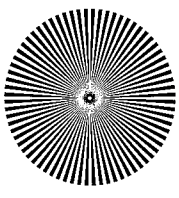


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8	x	d8 = 5	n5 = 1.45000	n6 = 1.51872	G
-48.609	d7 = 5	n4 = 1.49380	L4		
-127.071	d6 = 58.8	n3 = 1.59501	L3		
-89.375	d5 = 5.0	n2 = 1.62286	L2		
10.914	d4 = 2.87	n1 = 1.49380	L1		
16.976	d3 = 20.0				
-1542.254	d2 = 68				
143.454	d1 = 11.0				
	28.56°				
	-7.997°				
	1:1.10				
	Aperture ratio:				
	Half angle of view:				
	Magnification of projection:				

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$\tau_1 (L_1)$	$\tau_6 (L_3)$	$\tau_7 (L_4)$
$K = 1.0$	$K = 1.0$	$K = 0.0$
$C_2 = 0.0$	$C_2 = 0.0$	$C_2 = 0.0$
$C_4 = -0.15691 \times 10^{-6}$	$C_4 = +0.95381 \times 10^{-7}$	$C_4 = -0.22691 \times 10^{-5}$
$C_6 = -0.40068 \times 10^{-10}$	$C_6 = -0.73871 \times 10^{-10}$	$C_6 = +0.12283 \times 10^{-9}$
$C_8 = +0.21016 \times 10^{-13}$	$C_8 = +0.12280 \times 10^{-13}$	$C_8 = +0.84230 \times 10^{-13}$
$C_{10} = -0.37685 \times 10^{-17}$	$C_{10} = -0.33177 \times 10^{-17}$	$C_{10} = -0.20592 \times 10^{-16}$
$f_1 = 314.6$		
$f_2 = 88.0$		
$f_3 = -481.2$		
$f_4 = -99.6$		

100mm

UNITED STATES PATENT OFFICE.

GEORGE H. HOHNSBEEN, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF THREE-FIFTHS
TO J. D. BROWN, OF MINNEAPOLIS, MINNESOTA.

FACE-PLATE FOR VISE-JAWS.

1,307,050.

Specification of Letters Patent. Patented June 17, 1919.

Application filed October 18, 1916, Serial No. 126,411. Renewed April 19, 1918. Serial No. 229,661.

To all whom it may concern:

Be it known that I, GEORGE H. HOHNSBEEN, a citizen of the United States, resident of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Face-Plates for Vise-Jaws, of which the following is a specification.

The object of my invention is to provide improved means for mounting face-plates of softer metal upon the jaws of a vise to the end that finished work placed in the vise will not be marred or otherwise damaged by pressure of the jaws thereon.

A particular object of my invention is to provide a supporting means for these plates which will permit them to be easily mounted on the jaws and as readily removed.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification,

Figure 1 is a plan view of the vise with my invention applied to the jaws thereof,

Fig. 2 is a detail sectional view through one of the jaws,

Fig. 3 is a longitudinal sectional view through one of the face plates showing the means for mounting it on the vise jaw,

Fig. 4 is an end view of one of the face plates.

In the drawing, 2 represents the base of the vise, 3 the fixed jaw and 4 the movable jaw thereof, provided with the usual slide and operating handle or lever 6. These jaws have opposing faces 7 between which the material to be worked on is placed and clamped. 8 represents face-plates of a softer metal than the vise jaws, preferably brass, each having a longitudinal lip 9 at the top to rest upon the top of the jaw. The work is clamped and held between these comparatively soft plates. Each plate is provided with a flat spring 10, secured near the middle portion thereof to the face plate by a rivet 11. The springs have outwardly turned ends 12 and the outer portions of the spring are out of contact with the face of the plate, the spring being slightly bowed so that the projecting ends 12 converge and are separated or pressed apart when the plate is mounted on the vise jaw, the spring being put under tension and the ends 12 gripping

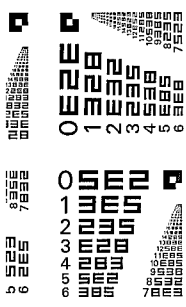
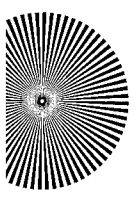
the sides of the jaw with a yielding pressure and holding the plate firmly thereon. This manner of mounting the plates allows them to be easily and quickly adjusted for use and as readily removed when the work has been performed.

Each face plate is preferably provided with a longitudinal recess or groove 13 in which its spring 10 is seated, the middle portion of the spring being flush substantially with the surface of the plate while the ends are bowed outward slightly, terminating in the angular extensions which grip the side faces of the jaws.

I claim as my invention:

1. The combination, with the vise-jaws having flat opposing faces, of face plates having flat rear surfaces fitting the faces of said jaws and provided at the top with outwardly projecting lips overhanging and seated on the tops of said jaws, the rear surfaces of said plates having longitudinal recesses therein extending from end to end of said plates, flat springs fitting within said recesses and secured at their middle portion therein, the end portions of said springs being bent outwardly and provided with spaces between them and the bottoms of said recesses, said end portions having outwardly projecting parts substantially at right angles thereto, the distance between said outwardly projecting parts being less than the length of the faces of said jaws; whereby, when said outwardly projecting parts are separated to clasp the end faces of said jaws between them, the end portions of said springs will be pressed into said recesses and put under tension.

2. The combination, with the vise jaws having opposing faces, of face plates having corresponding rear surfaces fitting the faces of said jaws and provided at the top with outwardly projecting lips overhanging and seated on the tops of said jaws, the rear surfaces of said plates having longitudinal recesses therein, and flat springs fitting within said recesses and secured at their middle portions therein, the end portions of said springs being bent outwardly and provided with spaces between them and the bottoms of said recesses, said end portions having outwardly projecting parts, the distance between said outwardly projecting parts being less than the length of the faces of said jaws, whereby, when said outwardly



8 PT.

are useful as prophylactic or treating agents for thrombosis, circulation improving agents for coronary blood flow such as coronary vasodilators, hypotensive agents and phosphodiesterase inhibitors. Furthermore, the carbostyryl derivatives are weak in heart rate increasing activity and also in cardiac muscle contraction increasing activity, and the carbostyryl derivatives are useful

Carbostyryl derivative or a pharmaceutically acceptable acid addition salt thereof, having excellent platelet aggregation inhibitory effect, calcium antagonism, hypotensive effect and phosphodiesterase inhibitory effect are useful as prophylactic or treating agents for thrombosis, circulation improving agents for coronary blood flow such as coronary vasodilators, hypotensive agents and phosphodiesterase inhibitors. Furthermore, the carbostyryl derivatives are weak in heart rate increasing activity and also in cardiac muscle contraction increasing activity, and the carbostyryl derivatives are useful

101.2 Aperture ratio:		1:1.10	
magnification of projection:		- 7.997 ^x	
If angle of view:		28.56°	
3.454	d ₁ = 11.0	n ₁ = 1.49380	L ₁
1542.254	d ₂ = 68		
6.976	d ₃ = 20.0	n ₂ = 1.62286	L ₂
0.914	d ₄ = 2.87		
89.375	d ₅ = 5.0	n ₃ = 1.59501	L ₃
127.071	d ₆ = 58.8		
48.609	d ₇ = 5	n ₄ = 1.49380	L ₄
	d ₈ = 5	n ₅ = 1.45000	S
o	d ₉ = 8	n ₆ = 1.51872	G

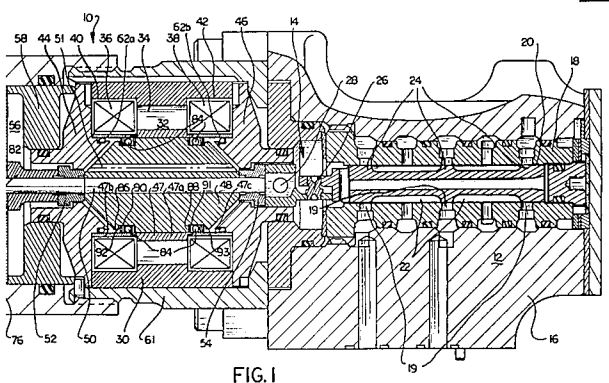


FIG. 1

8 PT.

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6 PT.

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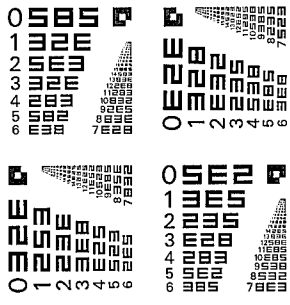
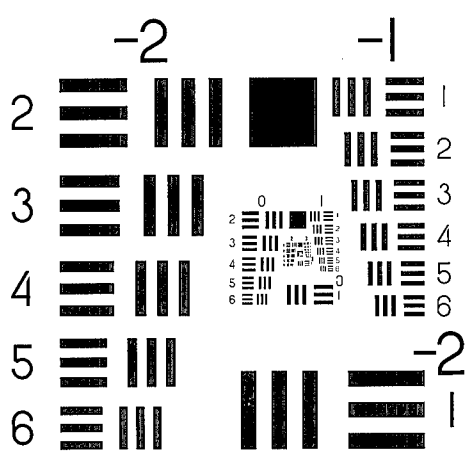
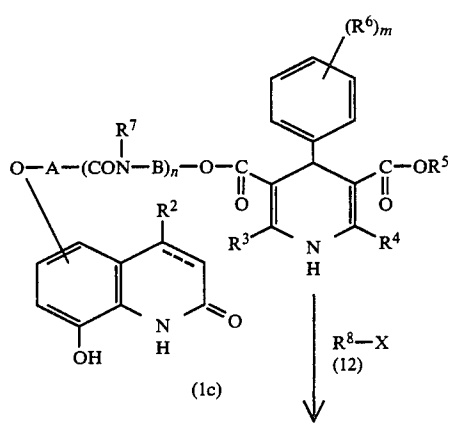
4 PT.

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$$(K_1x + K_2y + K_3z + T) + n(K''_1x + K''_2y + K''_3z + T') = 0$$

4 PT.

Carbostyryl derivative or a pharmaceutically acceptable acid addition salt thereof, having excellent platelet aggregation inhibitory effect, calcium antagonism, hypotensive effect and phosphodiesterase inhibitory effect are useful as prophylactic or treating agents for thrombosis, circulation improving agents for coronary blood flow such as coronary vasodilators, hypotensive agents and phosphodiesterase inhibitors. Furthermore, the carbostyryl derivatives are weak in heart rate increasing activity and also in cardiac muscle contraction increasing activity, and the carbostyryl derivatives are useful



$$v_{ref}(t) = K r \delta \left(t - \frac{2L - 2d_s}{v_w} \right) + K (1 - r^2) e^{-2\alpha d_s}$$

r ₁ (L ₁)	r ₆ (L ₃)	r ₇ (L ₄)
K = 1.0	K = 1.0	K = 0.0
C ₂ = 0.0	C ₂ = 0.0	C ₂ = 0.0
C ₄ = -0.15691 × 10 ⁻⁶	C ₄ = +0.95381 × 10 ⁻⁷	C ₄ = -0.22891 × 10 ⁻⁵
C ₆ = -0.40068 × 10 ⁻¹⁰	C ₆ = -0.73871 × 10 ⁻¹⁰	C ₆ = +0.12283 × 10 ⁻⁹
C ₈ = +0.21016 × 10 ⁻¹³	C ₈ = +0.12280 × 10 ⁻¹³	C ₈ = +0.84230 × 10 ⁻¹³
C ₁₀ = -0.37685 × 10 ⁻¹⁷	C ₁₀ = -0.33177 × 10 ⁻¹⁷	C ₁₀ = -0.20592 × 10 ⁻¹⁶
f ₁ = 314.6		
f ₂ = 88.0		
f ₃ = -481.2		
f ₄ = -99.6		



IMAGE SYSTEM TEST TARGET A

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

