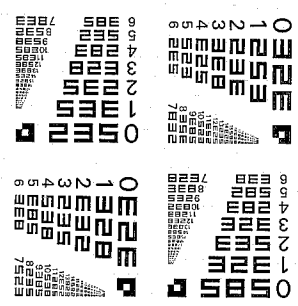
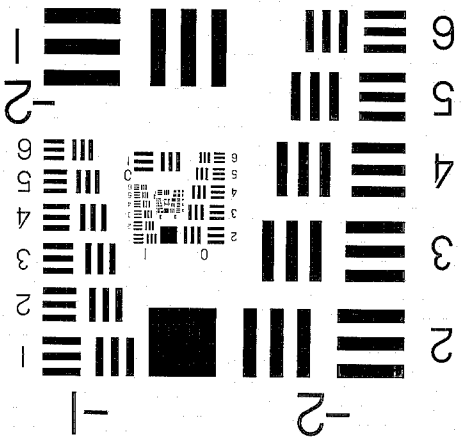
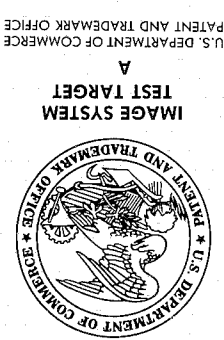


8	d8 = 5	n5 = 1.45000	G
-48.609	d7 = 5	n4 = 1.49380	L4
-127.071	d6 = 58.8	n3 = 1.59501	L3
-89.375	d5 = 5.0	n2 = 1.62286	L2
10.914	d4 = 2.87	n1 = 1.49380	L1
16.976	d3 = 20.0		
-1342.254	d2 = 68		
43.454	d1 = 11.0		
Aperture ratio:	1:1.10		
Angle of view:	-7.997x		
Angle of projection:	28.56°		



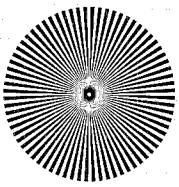
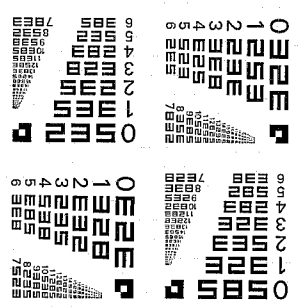
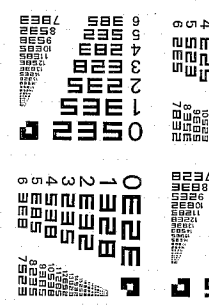
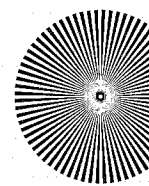
$$(K_1x + K_2y + K_3z + T) + n(K''x + K''y + K''z + T'') = 0$$

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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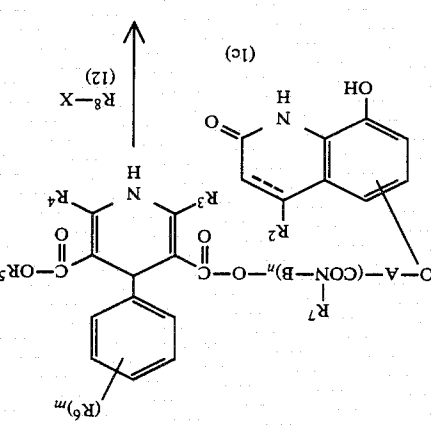
$$\cos \theta^* = \frac{K_2 - n \frac{T''}{y}}{\sqrt{K_1^2 + \left(K_2 - n \frac{T''}{y} \right)^2}} + K_3^2$$



t1 (L1)	t6 (L3)	t7 (L4)
K = 1.0	K = 1.0	K = 0.0
C2 = 0.0	C2 = 0.0	C2 = 0.0
C4 = -0.15691 × 10 ⁻⁶	C4 = +0.95381 × 10 ⁻⁷	C4 = -0.22891 × 10 ⁻⁵
C6 = -0.40068 × 10 ⁻¹⁰	C6 = -0.73871 × 10 ⁻¹⁰	C6 = +0.12283 × 10 ⁻⁹
C8 = +0.21016 × 10 ⁻¹³	C8 = +0.12280 × 10 ⁻¹³	C8 = +0.84230 × 10 ⁻¹³
C10 = -0.37685 × 10 ⁻¹⁷	C10 = -0.33177 × 10 ⁻¹⁷	C10 = -0.20592 × 10 ⁻¹⁶
f1 = 314.6		
f2 = 88.0		
f3 = -481.2		
f4 = -99.6		

100mm

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



No. 726,284.

PATENTED APR. 28, 1903.

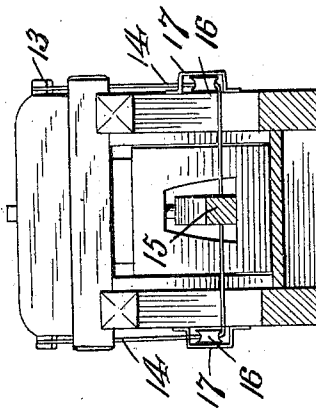
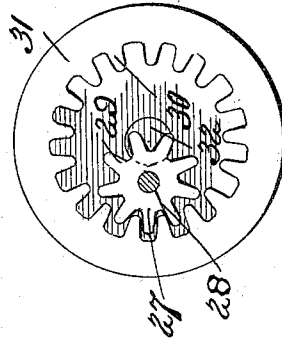
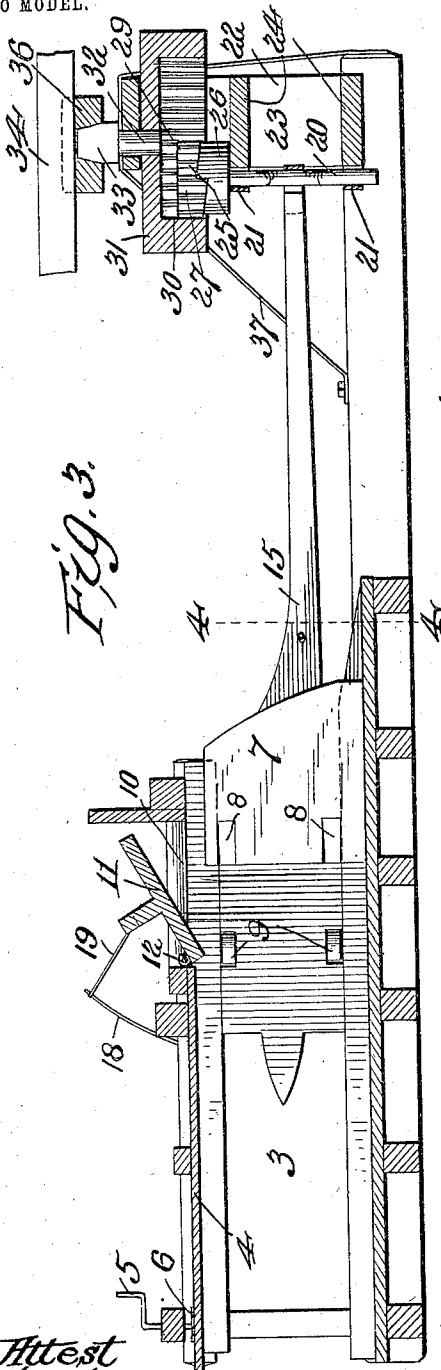
J. W. HAMILTON.

BALING PRESS.

APPLICATION FILED NOV. 5, 1901.

2 SHEETS—SHEET 2.

NO MODEL.



Attest
Walter L. Carroll -
Esquire

Inventor
John W. Hamilton,
By Wm L. Ford,
Attorney.

UNITED STATES PATENT OFFICE.

JOHN W. HAMILTON, OF CAMERON, TEXAS.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 726,284, dated April 28, 1903.

Application filed November 5, 1901. Serial No. 81,218. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. HAMILTON, a citizen of the United States, residing at Cameron, in the county of Milam and State of Texas, have invented certain new and useful Improvements in Baling-Presses, of which the following is a specification.

This invention relates to improvements in baling-presses, and is more especially designed as an improvement in presses of that character adapted for the baling of hay, cotton, &c.

The object of the present invention is the provision of a press of the character stated which is so constructed as to be exceedingly cheap, but at the same time capable of effectually performing its work; and, furthermore, the invention contemplates the provision of a baling-press embodying in its construction simple and efficient means for effectually feeding the material to be baled to the baling-chamber and which means are designed to be actuated through the operation of the plunger.

A further object of the invention is to provide a baling-press having an improved form of power and in which is embodied a novel form of connection between the sweep and the plunger-pitman, whereby motion is readily communicated from the sweep to the pitman with the least expenditure of effort on the part of the team and at the same time one which will readily permit the power being readily disconnected from the pitman when such is desired.

With these and other objects in view, which will appear as the nature of the improvements is better understood, the invention consists substantially in the novel construction, combination, and arrangement of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings, Figure 1 is a side elevation of a baling-press constructed in accordance with the present invention. Fig. 2 is a top plan view thereof. Fig. 3 is a longitudinal sectional view. Fig. 4 is a transverse sectional view on the line 4 4, Fig. 3. Fig. 5 is a detail view illustrating the clutch forming part of the power.

Referring to the drawings, the numeral 1 designates the frame of the herein-described

press, which frame comprises a pair of longitudinal beams 2, spaced a suitable distance from each other and forming the base of the press.

Arranged at one end of the beams 2 is the baling-chamber 3, which chamber is essentially of the usual construction in baling-presses, and said chamber is provided with an adjustable top 4, the outer end of which is free and adapted to be moved downwardly through the medium of adjusting-screws 5, having their lower ends bearing upon the outer surface of the top 4 in order to depress the latter to provide for the proper tensioning of the bale during the formation of the same. The adjusting-screws 5 are designed to impinge upon a contact-plate 6, which plate extends transversely of the top 4, and thereby relieves the latter of wear incident to the adjustment of the screws 5.

Sliding within the baling-chamber 3 is a plunger 7, which plunger is preferably in the form of a solid head, and the sides of said plunger are provided with notches 8, spaced at suitable intervals to receive a series of inwardly-extending yielding fingers 9 when the plunger is moved inwardly, and against said fingers the material being baled is adapted to impinge when the plunger 7 has receded or moved outwardly, the material being baled being thus held against retrograde movement.

The baling-chamber 3 is provided with a feed-opening 10, said opening being arranged at the forward or inner end of said chamber, and through this opening the material is introduced to the baling-chamber. For the purpose of closing the feed-opening 10 and at the same time to force the material into the baling-chamber 3 a packing-plate 11 is employed, said plate being hinged at one end to the contiguous portion of the chamber, as at 12, and through the medium of the plate 11 it will be apparent that the material placed within the feed-opening 10 is forced into the baling-chamber at each downward stroke of the plate 11, the latter being adapted to move in unison with the plunger 7. For this purpose the plate 11 is provided with a cross-head 13, the ends of which project beyond the sides of the baling-chamber 3, and connected to each end of said cross-head is a flexible cable 14, the forward ends of said cables being connected in turn to a pitman

15, connected to the plunger 7. Arranged at each side of the forward end of the baling-chamber 3 is a pulley 16, said pulleys being arranged in suitable brackets 17, and against
 5 the pulleys 16 the cables 14 are adapted to bear in order that said cables may be properly guided during the movement of the plunger and the consequent movement of the packing-plate 11. As just stated, the plate 11 is
 10 adapted to be forced downwardly in unison with the outward movement of the plunger 7; but in order that said plate may be elevated or returned to an open position a spring-arm 18 is arranged at the upper side of the baling-
 15 chamber 3 and is attached to the cross-head 13 by means of a flexible connection 19. It is thus obvious that as the plate 11 moves downwardly the same effects a tensioning of the arm 18, which tensioning effects the ele-
 20 vation of the plate 11 on the inward movement of the plunger 7.

As before stated, the pitman 15 is connected to the plunger 7, and this connection is such as to permit said pitman swinging in a
 25 horizontal plane, and the forward end of the pitman 15 is connected to a crank-shaft 20, which shaft is journaled in suitable bearings 21, connected to a vertically-extending framework 22. This framework constitutes the
 30 framework of the power and comprises vertical standards 23, between which are arranged at spaced intervals a pair of horizontally-disposed members 24.

Mounted upon the upper end of the crank-shaft 20 is a clutch 25, the latter comprising
 35 a lower member 26, secured to the shaft 20, and an upper member 27, loose on said shaft, and the opposing faces of said members are each provided with reversely-inclined cam-
 40 faces 28, adapted to coact with each other to effect a clutching action. The member 27 is maintained in engagement with member 26 by the gravity of said member 27. The upper member 26 is provided upon its periphery
 45 with a series of teeth 29, and said member therefore performs the function of a pinion, the teeth of said member meshing with internal teeth 30, formed upon a master gear-wheel 31. The diameter of said gear-wheel
 50 is proportioned to the diameter of the member 27, and extending upwardly from the center of said master gear-wheel is a spindle 32, the upper end of which terminates in a head 33, to which a sweep 34 is applied. The sweep
 55 34 comprises an elongated arm 35, to the central portion of which is applied a cap 36, adapted to receive the head 33 of the spindle 32. The sweep 34 is thus detachably connected to said spindle, and in the operation
 60 of the press a team is attached to each end of the sweep 34, so that the strain incident to the operation of the press is thus equalized throughout the length of the sweep.

If desired, the framework 23 of the power
 65 may be braced through the medium of suitable stays 37.

The clutch 25 is employed to relieve the

press and the team of all shock incident to the return of the plunger under the initial impetus given to the plunger when receding by
 70 the material under compression. Under such conditions the material when relieved of the pressure exerted upon the plunger expands until the springs 9 are reached, and in such
 75 movement causes the plunger to recede more quickly than would be permitted by the rate of speed at which the team is traveling. Unless, therefore, some provision is made to permit this movement of the plunger it is obvi-
 80 ous that the rebounding action thereof would be transmitted to the team with considerable shock; but by introducing the clutch between the master gear-wheel 31 and the shaft
 85 20 the latter is adapted to rotate at a greater speed during the receding movement of the plunger than the speed of the clutch member 27, inasmuch as the clutch member 26
 90 slides over and moves in advance of the member 27 to a point of rest, where it remains until the engaging faces of both clutch mem-
 95 bers come into coincident relation, whereupon the clutching action of the members is again effected and the plunger is again driven into the baling-chamber for another compression.

With the parts constructed as described the operation of the press is as follows: A team being hitched to each end of the sweep 34 and the material to be baled being placed within
 100 the chamber 3 it is apparent that as the plunger 7 moves inwardly said material will be forced into the chamber and beyond the yielding fingers 9. On the inward movement of the plunger the packing-plate 11 is
 105 permitted to rise, whereby the feed-opening 10 is uncovered, and, the material being placed within said feed-opening, it will also be seen that as the plunger 7 moves outwardly the
 110 packing-plate 11 is forced downwardly by the connections 14, and the material beneath said packing-plate is forced thereby into the baling-chamber into the path of the plunger 7 on its inward movement. This operation continues throughout the operation of the press,
 115 the movement of the plunger 7 being imparted by the continuous rotation of the master gear-wheel 31 through the medium of the sweep 34.

While the form of the invention herein shown and described is what is believed to be a preferable embodiment thereof, it will be understood that the same is susceptible of various changes in the form, proportion, and minor details of construction, and the right is therefore reserved to modify or vary the
 125 invention without departing from the spirit and scope thereof.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a baling-press, the combination with a baling-chamber provided with a feed-opening, and a packing-plate hinged to said baling-chamber and adapted to close said open-
 130

ing, of a plunger, flexible cables connected to said plunger and also connected to said packing-plate for depressing the latter during the outward movement of the plunger, guide-pulleys connected to the baling-chamber and over which said cables pass, and means for elevating the packing-plate when the plunger is moved inwardly.

2. In a baling-press, the combination with a baling-chamber provided with a feed-opening, and a packing-plate hinged to said baling-chamber and adapted to close said opening, of a plunger, flexible cables connected to said plunger and also connected to said packing-plate for depressing the latter during the outward movement of the plunger, guide-pulleys connected to the baling-chamber and over which said cables pass, and resilient means for elevating the packing-plate when the plunger is moved inwardly.

3. In a baling-press, the combination with a baling-chamber provided with a feed-opening, and a packing-plate hinged to said baling-chamber and adapted to close said opening, of a plunger, flexible cables connected to said plunger and also connected to said packing-plate for depressing the latter during the outward movement of the plunger, guide-pulleys connected to the baling-chamber and over which said cables pass, and a spring-arm arranged upon the baling-chamber and connected to the packing-plate for elevating the latter when the plunger is moved inwardly.

4. In a baling-press, the combination with

a baling-chamber provided with a feed-opening, and a packing-plate hinged to said baling-chamber and adapted to close said opening, of a plunger, flexible cables connected to said plunger and also connected to said packing-plate for depressing the latter during the outward movement of the plunger, said cables being arranged at the sides of the baling-chamber, guide-pulleys also arranged at the sides of said baling-chamber and over which said cables pass, and means for elevating the packing-plate when the plunger is moved inwardly.

5. In a baling-press, the combination with a baling-chamber provided with a feed-opening, and a packing-plate hinged to said baling-chamber and adapted to close said opening, of a plunger, flexible cables connected to said plunger and also connected to said packing-plate for depressing the latter during the outward movement of the plunger, said cables being arranged at the sides of the baling-chamber, guide-pulleys also arranged at the sides of said baling-chamber and over which said cables pass, and a spring-arm arranged upon the baling-chamber and connected to the packing-plate for elevating the latter when the plunger is moved inwardly.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. HAMILTON.

Witnesses:

M. J. ROBERSON,
T. C. STAFFORD.