

has been returned to its first position, substantially as and for the purposes specified. 4th. In a combination lock, the combination of two or more tumblers, each tumbler consisting of tumbler disc N, tumbler ring F, and tumbler support K united together, substantially as described, and a tumbler operating column having rod C<sup>16</sup> carrying teeth C<sup>29</sup>, and the finger disc C<sup>15</sup> arranged to move to and from the tumblers, provided with mechanism for enabling the rotation of the said disc when at one end of its reciprocal movement to rotate a given tumbler, and provided with spring C<sup>20</sup> embracing the rod C<sup>16</sup>, fastened substantially as described, substantially as and for the purposes specified. 5th. In a combination lock, the combination of two or more tumblers, each tumbler consisting of tumbler disc N, tumbler ring F, and tumbler support K united together, substantially as described, and the rod C<sup>16</sup> provided with teeth engaging the pinions k<sup>9</sup>, the rod C<sup>16</sup> reciprocating through the said shank, and the disc C<sup>15</sup> connected to the rod, the disc C<sup>15</sup> being capable of reciprocal movement to and from the tumblers, substantially as described, and spring for elastically returning finger disc C<sup>15</sup> to its first position, substantially as and for the purposes specified. 6th. In a combination lock, the combination of two or more tumblers, each tumbler consisting of tumbler disc N, tumbler ring F and tumbler support K, united together substantially as described, and rod C<sup>16</sup> provided with teeth C<sup>29</sup> engaging their respective adjacent pinions k<sup>9</sup>, the rod C<sup>16</sup> reciprocating through the shank, and the reciprocating disc C<sup>15</sup>, and means, substantially as described, for enabling the reciprocating movement of the disc to rotate the rod, substantially as and for the purposes specified. 7th. In a combination lock, the combination of two or more tumblers, each tumbler consisting of tumbler disc N, tumbler ring F and tumbler support K, united together substantially as described, and rod C<sup>16</sup> provided with teeth C<sup>29</sup> engaging their respective adjacent pinions k<sup>9</sup>, the rod C<sup>16</sup> reciprocating in the shank C<sup>4</sup>, and finger disc C<sup>15</sup> located in the recess C<sup>14</sup> at the end of the bed foundation portion of the tumbler operating column connected to the rod by mechanism, substantially as described, for enabling the said finger disc C<sup>15</sup>, when reciprocated and turned, to rotate the rod and move the teeth C<sup>29</sup>, substantially as and for the purpose specified. 8th. In a combination lock, the combination of two or more tumblers, each tumbler consisting of tumbler disc N, tumbler ring F and tumbler support K, united together substantially as described, and rod C<sup>16</sup> provided with teeth engaging their respective adjacent pinions k<sup>9</sup>, the rod C<sup>16</sup> reciprocating in the shank C<sup>4</sup>, the disc C<sup>15</sup> located in the recess C<sup>14</sup> and rigidly connected to the said rod C<sup>16</sup>, and provided with spring C<sup>20</sup>, substantially as and for the purposes specified. 9th. The series of tumblers having central openings through which passes an operating rotatable reciprocating shaft, having projections in combination with pinions for successively operating the tumblers, one of the said projections, when the shaft has been reciprocated in one direction and rotating a given distance engaging with one of the said pinions, the said projections when the shaft has been reciprocated in the opposite direction being out of engagement with the said pinions, substantially as and for the purposes specified. 10th. The combination of the catch C<sup>21</sup>, and the disc C and tumbler operating column, having shank C<sup>4</sup>, having two or more projections C<sup>5</sup>, and the tumblers having projections n<sup>1</sup>, and the shell having notches, as A<sup>3</sup>, A<sup>4</sup>, A<sup>5</sup>, substantially as and for the purposes specified. 11th. The combination of the catch C<sup>21</sup>, and the disc C and tumbler operating column, having shank C<sup>4</sup>, having two or more projections C<sup>5</sup>, and the tumblers having projections n<sup>1</sup>, and the shell having notches, as A<sup>3</sup>, A<sup>4</sup>, A<sup>5</sup>, and the reciprocating rod C<sup>16</sup> having teeth C<sup>29</sup> and finger disc C<sup>15</sup>, and elastic mechanism for returning the spring to its first position after being operated, and pinions, as k<sup>9</sup>, located substantially as described, substantially as and for the purposes specified. 12th. The combination of the catch C<sup>21</sup>, and the disc C and tumbler operating column, having shank C<sup>4</sup>, having two or more projections C<sup>5</sup>, and the tumblers having projections n<sup>1</sup>, and the shell having notches, as A<sup>3</sup>, A<sup>4</sup>, A<sup>5</sup>, and the reciprocating rod C<sup>16</sup> having teeth C<sup>29</sup>, and pinions as k<sup>9</sup>, located substantially as described, substantially as and for the purpose specified. 13th. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup>, one end bearing against the end C of the shell, and the other end of the spring pressing up the bottom side of the lower tumbler support, substantially as and for the purposes specified. 14th. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup>, one end located in a depression C<sup>12</sup>, in

the end of C of the shell, and pressing the tumbler devices together, substantially as and for the purposes specified. 15th. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup>, one end located in a depression C<sup>12</sup>, in the end C of the shell, and the washer O, against which the other end of the spring bears, this washer being below the lower tumbler support, substantially as and for the purposes specified. 16th. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup>, bearing against a fixed portion of the lock, and against the bottom of the end tumbler support, each tumbler having projections as n<sup>1</sup>, and the shank C<sup>4</sup>, having projections C<sup>5</sup>, for respectively engaging the projections as n<sup>1</sup> of the tumblers, and the rotatable disc C connected to the shank and having catch C<sup>21</sup>, engaging a fixed portion of the lock, and mechanism for rotating each tumbler to a given number, substantially as and for the purposes specified. 17th. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup>, bearing against a fixed portion of the lock, and against the bottom of the end tumbler support, each tumbler having projections as n<sup>1</sup>, and the shank C<sup>4</sup>, having projections C<sup>5</sup>, for respectively engaging the projections as n<sup>1</sup> of the tumblers, and the rotatable disc C connected to the shank and having catch C<sup>21</sup>, and a fixed portion of the lock having as many notches as there are tumblers, the notches being adapted to receive the said catch, and mechanism for rotating each tumbler to a given number, substantially as and for the purposes specified. 18th. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup>, bearing against a fixed portion of the lock, and against the bottom of the end tumbler support, each tumbler having projections as n<sup>1</sup>, and the shank C<sup>4</sup>, having projections C<sup>5</sup>, for respectively engaging the projections as n<sup>1</sup> of the tumblers, and the rotatable disc C connected to the shank and having catch C<sup>21</sup>, and a fixed portion of the lock having as many notches as there are tumblers, the notches being adapted to receive the said catch, and mechanism for rotating each tumbler to a given number, substantially as and for the purposes specified. 19th. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup>, bearing against a fixed portion of the lock, and against the bottom of the end tumbler support, each tumbler having projections as n<sup>1</sup>, and the shank C<sup>4</sup>, having projections C<sup>5</sup>, for respectively engaging the projections as n<sup>1</sup> of the tumblers, and the rotatable disc C connected to the shank and having catch C<sup>21</sup>, and a fixed portion of the lock having as many notches as there are tumblers, the notches being adapted to receive the said catch, and mechanism for rotating each tumbler to a given number, substantially as and for the purposes specified. 20th. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup> bearing against a fixed portion of the lock, and against the bottom of the end tumbler support, each tumbler having projections as n<sup>1</sup>, and the shank C<sup>4</sup> having projections C<sup>5</sup> for respectively engaging the projections as n<sup>1</sup> of the tumblers, and the rotatable disc C connected to the shank and having catch C<sup>21</sup>, and a fixed portion of the lock having as many notches as there are tumblers, the notches being adapted to receive the said catch, and rod C<sup>16</sup> having teeth C<sup>29</sup>, and connected to finger disc, and reciprocating with the length of the shank, and pinions as k<sup>9</sup>, for respectively operating the tumblers, and for engagement with the teeth of rod C<sup>16</sup>, substantially as and for the purposes specified. 21st. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup> bearing against a fixed portion of the lock, and against the bottom of the end tumbler support, each tumbler having projections as n<sup>1</sup>, and the shank C<sup>4</sup> having projections C<sup>5</sup> for respectively engaging the projections as n<sup>1</sup> of the tumblers, and the rotatable disc C connected to the shank and having catch C<sup>21</sup>, and a fixed portion of the lock having as many notches as there are tumblers, the notches being adapted to receive the said catch, and rod C<sup>16</sup> having teeth C<sup>29</sup>, and connected to finger disc, and reciprocating with the length of the shank, and pinions as k<sup>9</sup>, for respectively operating the tumblers, and for engagement with the teeth of rod C<sup>16</sup>, and mechanism for retracting the rod to its original position, substantially as and for the purposes specified. 22nd. The combination of the tumbler supports and the tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and the spring C<sup>10</sup> bearing against a fixed portion of the lock, and against the bottom of the end tumbler support, each tumbler having projections as n<sup>1</sup>, and the shank C<sup>4</sup> having projections C<sup>5</sup> for respectively engaging the projections as n<sup>1</sup> of the tumblers, and the rotatable disc C connected to the shank, and having catch C<sup>21</sup>, and a fixed portion of the lock having as many notches as there are tumblers, the notches being adapted to receive the said catch, and rod C<sup>16</sup> having teeth C<sup>29</sup>, and connected to finger disc, and reciprocating with the length of the shank, and pinions as k<sup>9</sup>, for respectively operating the tumblers, and for engagement with the teeth of rod C<sup>16</sup>, and mechanism for retracting the rod to its original position, substantially as and for the purposes specified. 23rd. The combination of the shank C<sup>4</sup>, fixed to the rotatable disc C, and having notch or recess C<sup>24</sup>, and teeth C<sup>5</sup>, and tumblers having projections as n<sup>1</sup>, for respective engagement with said teeth C<sup>5</sup>, and rod C<sup>16</sup> reciprocating in the shank, and having teeth C<sup>29</sup> on the blade C<sup>10</sup>, and mechanism for enabling the said teeth C<sup>29</sup>, as rod C<sup>16</sup> is turned to rotate the tumblers, substantially as and for the purposes specified. 24th. The combination of the shank C<sup>4</sup>, fixed to the rotatable disc C, and having notch or recess C<sup>24</sup>, and teeth C<sup>5</sup>, and tumblers having projections as n<sup>1</sup>, for respective engagement with teeth C<sup>5</sup>, and rod C<sup>16</sup> reciprocating in the shank, and having teeth C<sup>29</sup> on blade C<sup>10</sup>, and pinions k<sup>9</sup> for engaging said tumblers, and also said teeth C<sup>29</sup>, as rod C<sup>16</sup> is rotated, the sides of notch C<sup>24</sup> limiting the rotation of the blade C<sup>10</sup>, and thereby limiting the rotation of the said teeth C<sup>29</sup>, substantially as and for the purpose specified. 25th. The combination of the tumbler supports and tumblers, each tumbler made thicker than the depth of its seat in the tumbler support, and the envelope or shell in which said tumblers and their supports are contained, and elastic mechanism bearing