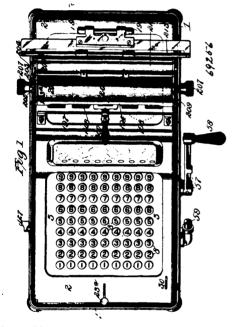
Claim.—In a sad iron, the combination of a core, provided with a smoothing surface, a shell adapted to enclose the core, with the exception of the smoothing surface and a narrow bead or bearing around the edge thereof, a non-heat conductor located between the shell and core, and a fastening adapted to temporarily bind the shell and core together, substantially as and for the purpose set forth. 2nd. In a sad iron, the combination of a core, provided with a smoothing surface, a removable shell adapted to enclose the core, with the exception of the smoothing surface and a narrow bead or bearing around the edge thereof, a fastening for temporarily holding the shell and core together, a dead air space, and a nonheat conducting lining surrounding the inclosed portion of the core, and partially filling said dead air space, to form a heat retaining barrier, substantially as described. 3rd. In a sad iron, the combination of a core provided with a smoothing surface and a narrow beal or bearing around the core, with the exception of the smoothing surface and a narrow bead or bearing around the edge thereof, a fastening for temporarily holding the shell and core together, and a non-heat conducting lining surrounding the inclosed portion of the smoothing surface and a narrow bead or bearing around the edge thereof, a fastening for temporarily holding the shell and core together, and a non-heat conducting lining surrounding the inclosed portion of the core, said shell being adapted to impinge upon said bead or bearing at it lower edge, together with said lining, to form a heat-retaining barrier, substantially as described.

No. 69,256. Calculating Machine. (Machine a valculer.)



Frank Charles Rinsche, St. Louis, Missouri, U.S.A., 8th November, 1900; 6 years. (Filed 1st August, 1900.)

Claim.-1st. The combination with a series of depressible keys, of means for holding said keys in a depressed position, whereby they act as stops, a slide bar common to said series of keys and provided with lateral projections designed to co-operate with the stops set up by the different keys in their depressed position, a rack pivoted to said slide bar, an adding wheel designed to mesh with said rack, an operating handle, friction devices interposed between said operating handle and said slide bar, whereby said slide bar is moved for-wardly by friction until arrested by one of the depressed keys, and means for throwing the rack into engagement with the adding wheel after the slide bar has completed its forward movement, sub-stantially as described. 2nd. The combination with a series of adding wheels, of a series of independently movable keys for each wheel, a separate stop designed to be set up by each key, a slide bar common to said series of keys and provided with lateral projections co-operating with the stops set up by the keys, a rack pivoted to said slide bar, an operating handle, friction devices interposed between said operating handle and said slide bar, whereby, said slide bar is moved forwardly by friction until arrested by one of the key stops, means connected with the operating handle for throwing the rack into engagement with the adding wheel after the slide bar has completed its forward movement, the friction devices operated by the handle restoring the slide bar and rotating its meshed adding wheel, and means for throwing the rack on the slide bar out of engagement with the adding wheel when the operating handle reaches the limit of its return movement, substantially as described. 3rd. The conbination with a series of independently movable keys whose shanks are staggered, the hands of said keys being in alignment, lateral projections extending from the key shanks, a pivoted wing in the path of said projections, a locking plate which is held in a retracted

position by said wing, and means on said plate for locking a depressed position by said wing, and means on said plate for locking a depressed key in its lowered position, and the rest of the keys of that series in their elevated position, substantially as described. 4th. The combination with a series of independently novable keys whose shanks are notched, of lateral projections extending from said shanks, a latch plate in the path of said projections, a sliding lock-ing plate held in a retracted position by the latch plate, and a spring whose ends are connected to said latch plate and sliding locking plate, respectively, substantially as described. 5th. The combination with a series of independently movable keys whose shanks are staggered and provided with notches of lateral projections on said key shanks, a pivoted wing in the path of said projections, a locking plate which is controlled by said pivoted wing, said locking plate being provided with shoulders on each side for co-operating with staggered key shanks, and means for forcing the locking plate forward whenever the pivoted wing is depressed, substantially as described. 6th. The combination with a series of keys, of projec-tions arranged on the shanks there of, a pivoted wing in the path of said projections, a sliding locking plate, a stop on said locking plate co-operating with the projections on the pivoted wing, and a spring whose ends are connected to said pivoted wing and to be locking plate, respectively, substantially as described. 7th. The combina-tion with a series of independently movable keys designed to set up stops, of means co-operating with said keys for locking the depressed key in its lowermost position, and the remaining keys of that series in their elevated position, and a spring common to a plurality of keys of that series for restoring the depressed key to its elevated position after said key has been released by the locking plate, sub-stantially as described. 8th. The combination with a series of independently mevable keys, of means for locking the depressed key of the series in its lowered positon, and the remaining keys of that ot the series in its lowered position, and the remaining keys of that series in their elevated position, a slide bar provided with pro-jections, one of which co-operates with the depressed key, and a lock for said slide bar, said lock co-operating with the key lock in such manner as to release the slide bar upon the depression of any key in the series, substantially as described. 9th. The com-bination with a series of independently movable keys whose shanks bar staggered, said keys, when depressed, forming stops, of a slide bar provided with projections for co-operating with the key stops, alternate projections on the slide bar extending in opposite direc-tion, substantially as described. 10th. The combination with a series of staggered key stops, of a slide bar occupying a medical line with respect to said series of staggered key stops, projections on said slide bar, alternate projections extending in opposite directions, sand means for moving said slide bar longitudinally, whereby one of its carried projections will co-operate with one of the key stops, substantially as described. 11th. The combination with a staggered series of key stops, of a slide bar travelling in a medial line between said stops, projections on said slide bar for co-operating with the key stops, each projection on the slide bar individually co-operating key stops, each projection on the slide bar individually Co-operating with its respective key stop, and means for moving said slide longi-tudinally, where by one of its carried projections will co-operate with one of the key stops, substantially as described. 12th. The combi-nation with several series of keys, of a slide bar common to each series of keys, stops on said slide bars for co-operating with the shanks of the depressed keys, latches or locks for said slide bars, mechanism which is operated by any key of a series for locking said key in its depressed resition, and the remaining keys of that series key in its depressed position, and the remaining keys of that series in an elevated position, said mechanism also releasing the slide har common to the series wherein the key is operated, and means for imparting longitudinal motion to the slide bar after its release, sub-stantially as described. 13th. The combination with several series of keys, of a slide bar common to each series of keys, stops on the slide bar for co-operating with the shank of a depressed key in the series to which said slide bar is common, mechanism which is thrown into action by the depression of a key in a series to lock said key in its depressed position, and the remaining keys of that series in an elevated position, said mechanism releasing the slide bar common to that series of keys, friction devices in engagement with the slide bars for moving the same forward until one of the stops thereof contacts with its respective key shank, and means for moving said friction devices a predetermined distance irrespective of the arrest of the driven slide bar short of the limit of movement of the friction devices, substantially as described. 14th. The combination with a key board comprising series of independently movable keys, of a sliding plate common to each series of keys, levers in the paths of said sliding plates, latch pins, operated by the several levers, and slide bars co-operating with said latch pins, substantially as describ-15th. The combination with a key board comprising series of independently movable keys, of sliding plates common to the several series of keys, bell crank levers having one member in the path of a soliding plate, latch pins co-operating with the other member of said bell crank levers, and slide bars which are released whenever the latch pins are raised, substantially as described. 16th. The combi-nation with the second substantial second se nation with a key board comprising series of independently movable keys, of locking plates common to the several series of keys, and which are designed to move forward whenever a key in a series to which the plate is common is depressed, bell crank levers 44 having one member in the path of movement of a plate, a latch pin 42 formed with an opening for receiving the other member of said bell crank lever, a bar 43 in which said latch pins operate, and slide bars 32 having shoulders 41 for co-operating with the latch pins, said lide bars being guided in the movements by the bar 43, substantially