This invention relates to spring pads, such as are used in garment and laundry pressing machines and has for its object a spring pad which is particularly simple and economical in construction and highly efficient and durable in use.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

Figure 1 is a fragmentary elevation of a spring pad embodying my invention, the same being shown as applied to the buck of a pressing machine and in its position occupied when under pressure from the head of the machine.

Figure 2 is a fragmentary elevation of one of the springs, and one of the tie pieces or strips.

Figure 3 is a fragmentary end view of the pad.

Figure 4 is an end elevation of one of the springs when under compression.

Figures 5 and 6 are respectively a plan view and a side elevation of the detached tie piece or strip for securing the springs together.

Figure 7 is a fragmentary plan view of the pad.

Figure 8 is a fragmentary elevation of this pad showing the same applied to the roll of a flat work ironer.

Figure 9 is a fragmentary sectional view on line 9—9 Figure 8.

This pad comprises generally, a plurality of springs arranged side by side and lying on their sides, the coils of the springs having their upper portions arranged in a plane for providing a maximum pressure surface and means for securing adjacent springs together. The coils are preferably rectangular and usually square in order that the springs may lie as close together as possible so that their straight upper strands will extend over a maximum area with spaces or valleys of minimum extent between the springs, and also so that their lower sides will have a maximum flat bearing on a supporting surface as the face of the buck or periphery of a roll.

1 designates the springs of the pad which are rectangular in general form as shown in Figures 2 and 3 so that their upper and lower strands 2 and 3 are parallel and straight.

The coils are normally arranged at an incline so that when pressure is applied thereto, they move toward a horizontal position or have a yielding flattening effect as shown in Figures 1 and 4.

The means for securing the springs 1 together are shown as located between adjacent springs and are here shown as tie pieces having lugs which interlock in some of the coils of the springs.

In the illustrated embodiment of this invention each tie piece or strip 4 is arranged edgewise between adjacent springs and has laterally extending lugs 5 at their lower edge from which project upwardly extending prongs 7 which interlock in coils of the springs as shown in Figure 2. The prongs 7 are provided with hook-like projections formed with inclined upper faces 9 which cause the spring coils to interlock therewith by a latching action by merely pressing down on the springs. These hook-like projections 8 are provided by forming laterally extending flanges or ears 10 on the flanges 7, the ears or flanges being inclined so that their upper faces 9 are inclined. Each prong 7 is bifurcated with a space 11 between its bifurcations and the ears 10 on the bifurcations inclining oppositely. When the spring is pressed into interlocking engagement with the lugs 5, the coils which happen to engage the ears 10 of any one lug spread in opposite direction and latch into engagement with the hook-like projections 8 of that lug, and the intermediate coil passes into the space 11 between the bifurcations.

Preferably, there is one strip between each two springs, this strip extending the full length of the springs or in other words, there are several lugs provided on one upright strip 4. As seen in Figure 1, this pad may be applied to the buck 12 of a platen press and the springs overlaid with a layer 15 of fibrous material.

In operation, when the head 14 of the press comes down onto the work 15 lying on the pad, any projections or unevenness as buttons 16 and lapping seams on the work will press...
into the fibrous layer 13 and the underlying coils of the springs will flatten more than the other coils as clearly seen in Figure 1. The strips 4 limit the flattening or compressing of the springs.

In Figure 8, the springs are shown as wrapped around a roller which coacts with a shoe 18 and the individual operations of the coils of the springs underlying depressions as buttons on the work is illustrated at 19. The supports for the springs are hook shaped lugs similar to the lugs 8 but struck up from a strip 17 curved to fit a roller.

This spring pad is particularly advantageous in that it consists of a few parts which can be quickly assembled and hence the pad can be economically manufactured at much less price than the spring pads now used and further it is particularly adapted for presses where the pressing member, buck or roll is heated as the spring pad is entirely open to the surface of the buck or roll and does not include base plates. Furthermore, as it does not include base plates, the pad is flexible and can be readily rolled up for shipping.

What I claim is:

1. A spring pad comprising coiled springs lying on their sides, the upper and lower portions of each coil being located in parallel planes and means for directly securing adjacent springs together at their contiguous sides.

2. A spring pad comprising coiled springs lying on their sides and means for securing adjacent springs together including a strip arranged edgewise between the springs and having means on opposite sides thereof for interlocking with the coils of the springs.

3. A spring pad comprising coiled springs lying on their sides and means for securing adjacent springs together comprising a tie piece having lugs interlocked with the coils of the springs.

4. A spring pad comprising springs lying on their sides, each coil being substantially rectangular and means for securing adjacent springs together comprising a strip having lugs extending between adjacent springs and interlocked with the coils of the springs.

5. A spring pad comprising coil springs lying on their sides, means for securing adjacent springs together comprising a strip having laterally extending lugs formed with hook-like projections having inclined upper faces for causing coils of the springs to interlock therewith by a ratcheting action when the springs are pressed on to the projections.

6. A spring pad comprising coil springs lying on their sides, means for securing adjacent springs together comprising a strip having lugs each of the lugs having oppositely disposed spaced apart, hook-like projections having inclined surfaces at their upper ends for causing the coils of the springs to have a ratcheting action to come into interlocking engagement with said projections.

In testimony whereof, I have hereunto signed my name at Syracuse, in the county of Onondaga and State of New York, this 16th day of May, 1927.

HARRY ALBERT STEELE.