Nathan Hale sat on before his ex—"

"I see. Have you any sale for foreign goods?"

"Yes, but it doesn't do to keep more than three or four distinguished foreign articles in sight at a time. There's some furniture our public cannot swallow easily. As a rule, though, it is safe for a dealer to act upon the principle that his goods are as likely to be as authentic as not. If he doesn't know to the contrary, it is fair to affirm that *his articles* are what they look to be. Very many buyers, though, don't care for relics; they want respectable old furniture that looks as if it belonged to a wealthy grandmother. Here and there you've got to remark that an article was found in—well, almost in Julius Cæsar's garret. I had to sell a Maria Stuart sofa the other day. I had it laid out for a Hannah More, but had to mark it out to suit.'

"The sources of supply—that is for genuine goods—is getting weaker and weaker. Grand-fathers' clocks, for instance, of good style and in fair order are scarce. I sold my last one for $235. The customer told us plain out that he wanted something that showed 'ancestry,' and we let him have it. The New England States have been travelled through and through for them. Once in a while one turns up. The old carved bookcases and chests of drawers, mounted in genuine *old-time brass, can be had now* and then. Carved oak mantel and chimney pieces, tiles, tapestries, etc., are good when you can get hold of them. One trouble is growing weaker every year. We cannot get anything like full sets. Sometimes we have to wait a year or more before we can decently complete a room. Such collections bring very high prices. I know of one that fetched $2,200. As for most of the ancient bric-a-brac, it should be regarded with suspicion. Revolutionary teapots were once a leading article on account of the firing of the tea overboard. But I regret to say that the demand was broken up by an unprincipled dealer whose fraudulent methods knocked the life out of what was once a very salable article.

"Yes, personal relics are to be had. Genuine ones are rare. There are dealers, though, who will sell you anything you want from a Gen. Putman sword to *the bull's-eye repeater of a delegate to* the first Congress. These last articles are known to the trade as 'orphans.'

"Oh, don't speak to me about manufactories of our goods. It is most awful to think of. Yes, sir, I know two factories where its done. It's an insult to liberty."—*Jewelers' Circular.*

THE BREAKING OF SPRINGS.

Much has been said about the breaking of springs and their causes, but the subject remains ever new. A correspondent in a German newspaper gives the following views:

Every watch spring will finally arrive at the period when it will break. Repeated concussions will burst a cannon, break an axle, and cause the breakage of a rail. Caused by the unceasing bending to and fro, of a piece of metal, its cohesion will be destroyed, and it bursts or breaks. Since from the preceding it cannot be expected that watch springs are an exception, we may only consider what means will hasten or retard the final breakage. We may specify the following points:

1. Hardness and quality of the steel; 2. dimensions (measure); 3. treatment; 4. change of temperature; 5. crystalization, decarbonization, and electrical influences.

1. Steel is composed of iron and carbon. If we heat it in the fire for the purpose of hardening, the carbon endeavors to disengage itself. In this condition we sud denly plunge it into some cold fluid; the carbon crystalizes, penetrates the iron *with its diamond-like molecules,* and the steel becomes so hard as to cut glass. This is a practical reasonable theory, and undoubtedly the true one, since the microscope can substantiate it, and we will accept it for want of a better.

If we temper the steel blue, a retrograde chemical action takes place. The circumference of the steel increases a trifle, and it is, as it were, enveloped in an impenetrable coating, within which the molecules or atoms arrange themselves. This imparts the elasticity. When this extremely thin colored envelope is removed, a part of the elasticity is lost. Hence, a blue spring has more power of tension than a white one.

In accordance with the unequal disposition of the carbon in steel imperfections can be inherent in the spring, and an undue hardness is produced in any one or more of its parts. Such imperfections may also be engendered by an unequal heaung, so as to disturb the local porportions of the carbon. Defects of this nature cannot be detected by the eye, and the watchmaker can only obviate the breakage of springs, due to such bad treatment, by using those of a recogniz ed good standard.

2. One proportion of spring dimension is preferable to the other. The use of a broad and weak spring is preferable to that of a narrow and strong, and by right proportions, the like power may had.

A thin steel at bending does not suffer a displacement of its atoms as much as a thick one, because the rounded side of the first is nearer, to its fulcrum, or the point around which it bends or moves. A thin piece of glass may be bent, while a thick one shatters with the least attempt. A recommendable proportion of the spring would be a gradual decrease of di mension of its coils, as they would more concentrically accommodate themselves around the core; this only applies to movements with fuzee; the best form for movements with toothed barrel is an equal thickness throughout its entire length.

2. When we wind a spring close around the core, we obtain more coils than it has when at rest against the barrel wall. The difference in the number gives us the revolutions which the spring will make when being wound.

If the space between spring and core is large, and we made use of its entire power, or, in other words, we do not use a fuzee and stopwork, the elasticity of *the spring would be increased, also the* danger of breaking, than if less room were at disposal.

The use of the whole unconfined spring power produces friction of its coilings by the tightened elasticity, destroys the colored lamina of the spring blade, and thus lessens its elasticity, the surface becomes porous, and inclines the spring to breaking.

Also the same defect is often produced by too strong a winding of the spring, both in movements with fuzee and in those with toothed barrel and stopwork. This is often done for the purpose of overcoming a cramping or friction in the movement, or some other error, a correction of which is very difficult, and it is sought by this means to conquer it by an increased power of spring; sometimes it is intended to produce the greatest possible balance vibration. This doubtful remedy is oftener the cause of a spring *breaking than all the others taken together*

The following is a right proportion of the spring: 14 coils (never less than 12) must lie within the spring barrel: the empty space between the spring and the