

shot in the shape of a blow, the object of retardation being to render the pressure equal.

Undoubtedly the great defect of smooth bore ordnance was the fact, that the centre of the shot and of the bore of the piece did not coincide; and the former left the gun by a series of rebounds, which eventually destroyed it. We have seen Sir W. ARMSTRONG'S method of obviating the difficulty involved, in remedying this defect in the existing artillery of the period, the failure of that method; and we have now to consider the effect produced by the new system introduced in its place.

In order to centre the shot, which is, as has been shown, the first condition of the success of rifling, the muzzle loading system introduced the practice of inserting into it a series of projecting studs of gun-metal fitting the grooves of the rifling, and thus holding the shot in its place, provided the motion given at the first impact was uniform throughout; in other words, that there would be pressure instead of a series of blows.

As the very first display of the energy of gunpowder is in the shape of a blow, the condition could not be complied with; and, as even with the studs, a certain amount of *windage* had to be left; the shot was jerked downwards, thrown upwards, and in most cases the studs over-rode the lands of the bore instead of keeping in the grooves; the result being either the breaking up of the shot in the gun, its uncertain flight, or the cracking of the inner tube, thus rendering it almost useless, and the liability of the shot to break up scattering the pieces far and wide in the event of striking.

These peculiarities were aggravated by the *gaining twist*, so that it is a question whether any portion of the splendid artillery recently manufactured at such great cost in England is really in a serviceable condition.

The speech of the leader of the great Tory party (Mr. D'ISRAELI), at the Crystal Palace, has awakened attention to the great political issues involved in the relations between Great Britain and her Colonies.

Already in Australia a movement has been made for the union of the Colonies in that great island *continent*, and having for its ultimate object a closer and more intimate relation with the Mother Country. It is strange too that the leader is an Irishman—one of those clever and talented men engaged in the attempted revolution of 1848—editor of the celebrated *Nation* newspaper—tried for *constructive* treason by a jury of *Orangemen*, and acquitted because they very properly refused to recognise a *constructive* crime. CHARLES GAVIN DUFFY is, therefore, no ordinary man; and on the principle that a converted rake makes a good husband, a repentant rebel will make something more than a good Tory. However that may be, in the whole miserable transaction he alone stood *sans puer sans reproche*, commanding

the respect as well as esteem of his opponents. Subsequently elected as member of Parliament for New Ross, he served with the extreme Irish section of the House of Commons. He finally emigrated to Australia, where his splendid natural abilities placed him at once in the foremost rank.

Such is a slight sketch of the career of the man who has made the attempt to establish in Australia a confederacy similar to that under which Canada has commenced her national career; and although his designs are frustrated for the moment, there can be no doubt they will succeed.

The general end and aim of all these movements in the Colonies is not to create a separate national existence, but to build up around the British throne that magic circle of gold that binds the Empire together—outlying bulwarks of rapidly increasing strength and power, sufficient to bid defiance to the attacks of the world in arms. Such is the Colonial idea of an United Empire, and the fault will not rest with Colonists if it is not carried out.

If our English brethren wonders why we are so enthusiastic in our loyalty, and why we desire a closer alliance, we can point to the experiment made on this continent one hundred years ago, and tell them that with the example of the revolted American Colonies before us, we turn with loathing and disgust from the travesties of liberty and political licentiousness which flourish under Republican institutions, and we are satisfied that our true interest is to remain an appendage of the Great Empire under whose institutions true liberty is to be found. Morally and materially such interests will be best served by a close alliance, in fact as well as in theory, in practice as well as in sentiment.

It is our conviction that if the closer union of the Colonies with Great Britain were effected, either by some Legislative arrangement, or simply by calling one or two prominent statesmen from each confederacy to serve in the British Privy Council, (as lately done in the case of the Right Hon. Sir J. A. MACDONALD, K.C.B.,) the immediate effect would be the diversion of English surplus capital for Colonial development from seeking investment as it now does in foreign securities, by which hostile powers are developed in every relation, to the interest of the money lenders and the country in which the capital is owned. That one effect alone would cover all others, whether of commerce or manufacturing supremacy, and would add double security to every interest concerned.

The magnitude of the Empire whose strength would be developed can be measured by the following list:

1. The British Isles.
2. The Dominion of Canada.
3. The West Indian Islands.
4. The Australian and South Sea Colonies.
5. The South African Colonies.
6. The Empire of Hindostan,

Such a confederacy should rule the world. War with any member meant war with all, and it would not be the subject for consideration whether Canada was interested in any row between Jamaica and the Yankees, but the fact that a single member of one of the States of the Empire had been injured, and it was the duty of all to protect its rights.

There is hardly any need to point to the condition of Canada (before and after confederation) as an illustration of the doctrines laid down; the facts are too notorious to be gainsaid or contradicted. Before, we, British North American Colonists, were poor, without an army or money, dependant on our neighbours for our ordinary commercial movements; now, we own a large commercial marine. Our army is quite equal to our own defence, and if occasion should arise we could send a contingent to aid the dear Mother Land. And to crown all, our people are prosperous.

What has happened here will assuredly occur under similar conditions elsewhere, and it must be a series of criminal blunders that will prevent the union of Great Britain and her Colonies from being perpetual.

We republish in this issue from, *Broad Arrow*, an article on the forthcoming Gazette of the British Army, in which the various Colonial forces figure for the first time, as the Reserve Colonial forces of the Crown.

The kindly notice of our contemporary contains a large amount of statistical information new to most of our people and valuable as shewing that the military spirit of the English race is not extinct, that it morally requires a little common sense statesmanship to weld the outlying sections of the Empire and the mother country into the most powerful Monarchy the world has ever seen, and that the spontaneous military organizations springing up in all the colonies will furnish the necessary leverage for that purpose.

In common with the great mass of our people the conviction has been reluctantly forced on us, that as long as the English people will be governed by a lot of shallow doctrinaires, as her present rulers are, such a consummation need not be looked for, and we can assure our contemporary that any action of the Whig Radicals is viewed in Canada with contemptuous indifference, they could not insult us.

The omission of the Canadian military force from the Royal Gazette will be looked on with regret; our people know full well the source from which such a slight springs to feel the slightest anger at it, as in addition to his desire to serve his master's of the Manchester school, that great military reformer Mr. CARDWELL probably was moved by the amiable wish to save the British taxpayers £50 per annum in printing expenses, not deeming too much knowledge of what