

ing, doing business and enjoying life should never be exchanged for the straight-laced, sectarian methods that invariably obtain in the older States of our Union.

To bring about this great desideratum, and thus cause our hopes to become realities, we see but one way of proceeding. Amid the din and jostle incident to the influx of a large immigration, our own peculiar institutions must be preserved from the incursions of Eastern heterodoxy. Living as we are, in the beautiful sunset land of reality as well as romance, let us foster with due fidelity, whatever is really occidental in our physical, moral and intellectual temperament.

While our language and literature is national, in the main, there is, after all, like our forest breezes, a refreshing odor, all our own, pervading and identifying all we say or do. National integrity and unity do not necessarily imply strict homogeneity of constituents; nor do they preclude the existence of those pleasing varieties which Nature herself observes and maintains in the economy of the human race. Our *fauna* and *flora* differ very widely from those of the Atlantic States. Our charming landscapes and mountain scenery surpass the power of ordinary language to describe. Our climatic peculiarities have more than once provoked the dreams of Paradise in the minds and souls of our poets. Even in the various departments of inorganic nature, such strange departures are presented that geologists have regarded our land as a newer creation than the Atlantic coast. Is it strange, then, that amid all these scenes, through the processes of action and reaction, many pleasing innovations should discover themselves among our people, and thus lend their charms to strangers and visitors from other lands? Let us look well, then, to the faithful preservation of our local patriotism, our truly Western institutions, the sovereignty of our manners and customs, and finally, our occidental language and literature.

"I have a great ear, a wonderful ear," said a conceited musician, in the course of conversation. "So have all jackasses," replied a by-stander.

To remove rust from steel, rub well with sweet oil. In forty-eight hours, use slacked lime, powdered very fine; rub until the rust disappears.

MULTUM IN PARVO.

To the uninitiated, hewing money out of fir and cedar stumps may appear to be a rather paradoxical business, but we beg the indulgence of our readers while we show them that such a thing is clearly and practically possible. In a sea-going craft of a thousand tons burthen, there are from three to five hundred ship knees utilized to impart strength and rigidity to the framework of the hull. A double-decker, of course, requires nearly twice as many knees as are used in a single-decked vessel. The general reader may form something of an idea of the immense number of these pieces used, when he is told that each end of every beam is secured by three knees firmly bolted to the ribs and girders of the ship. In fact, wherever an angle offers the opportunity, there a knee is fitted and bolted.

These rugged and ugly-looking pieces of gnarled timber are the thews of the ship, being somewhat analogous to the braces in the frame of a strong house, and yet far superior in strength, since they are so fashioned as to become solid angles themselves. The size of a ship-knee is rated according to the width of its vertex, or "elbow," and priced at so much per inch for this dimension. Thus a knee which would square, or "face," as the carpenters say, ten inches, would be worth, at fifty cents per inch, five dollars. Hence, it will be seen that the intrinsic value of a tree sending forth spurs at its base large enough for ship-knees, amounts to considerably more than what the clear lumber it contains would sell for.

These important elements of a ship's frame are gotten out at nearly all angles—acute, obtuse or right angled—just as the fangs of the stump will work most easily and profitably. It is often remarked that there is neither a right angle nor a straight line in any of the wood-work of a ship's hull. While this may not be strictly true, it is certain that very few of the thousands of knees used in a ship-yard are finished with an apex at a right angle, or their sides straight lines. This fact redounds essentially to the favor of the contractor who saws and hews the knees from the stumps.

We are informed by woodmen who are experienced in this work, that from two to five good ship's-knees can be

taken from the base of fir and cedar trees, and that on an average, three can be safely counted on in the forests of this part of the coast.

The history of marine architecture, unlike that of house carpentry, shows a gradual increase, rather than a falling-off, in the amount of timber used in the construction of wooden ships. As deep sea-going vessels are much larger now than formerly, they would be relatively much weaker were it not for the more complete consolidation of timber consumed in the construction of the frames; and as this tendency to consolidate proceeds, there is a much greater draft upon angular sticks worked from natural crooks than upon any other kind of timber used. Again, traversing as they do, every navigable body of water on the globe, ships of all kinds are more severely tried, now, than in earlier times, and as a necessary consequence, they are proportionately much stronger.

From what has been said, farmers and woodmen will see that there is both economy and profit in the utilization of sound stumps in the way and manner we have endeavored to set forth above. But especially is this true in the neighborhood of our navigable streams and other bodies of water bearing our national commerce. No especial mechanical skill is required to carry on this industry. By cutting, sawing and cleavage, the spur or fang is separated from the base of the tree; it is then rough hewed in the usual way, and finished with the adz and broadaxe. Getting out ship's-knees is a much more lucrative employment for farmer's sons, during the winter months, than hunting and fishing. Let the sticks be taken from good, sound trees, let them be of all sizes and angles, and nicely finished, and our word for it, they will find ready sale in any of our seaport towns. Should there be a temporary lull in the market, they can be easily housed from the weather. Not a winter passes but hundreds of trees are turned over by wind storms, the roots of which are easily accessible for the prosecution of this enterprise.

The Eastern demand for ship timber of all kinds is rapidly increasing. Deck plank and spars constitute the bulk of out-going cargoes at the present day, but we believe the time is near at hand when the smaller and more rugged pieces will be shipped from Oregon and