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THE ORIGIN AND EARLY GROWTH OF HEBREW PROPHECY*.

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A NYONE who comes under the influence of the idea of development soon discovers that the finished products of nature or the human spirit can be understood only in the light of their whole history. The great man now making history and creating the influences which mould the youth of a nation was once a boy himself, played upon by the moral and intellectual influences of his time, and can be thoroughly understood, if he ever can be understood, only when we follow him from the cradle upwards. And so the biographer of recent years, while allowing for the free play of his hero's individuality, has been careful to trace his ancestral history and set forth the discipline of home and school and university which gave shape to his early life.

It need not surprise anyone, then, that the student of Hebrew Prophecy should soon feel the need of a more or less thorough knowledge of its origin and early character. Such a perfect piece of ethical writing as the prophecies of Amos, the first writing prophet, must have been preceded by centuries of moral and literary preparation.

Moreover when we do make our way back to the infancy and boyhood of the great man, we are not at all surprised to find intellectual vagaries and moral weaknesses which his manhood has outgrown. So we should not be surprised, when we read the early

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history of Hebrew Prophecy, to find in it moral weaknesses and childish practices which the later prophets outgrew and discarded. If we ultimately find that the early prophets of Israel for many years employed "not only the methods but even much of the furniture of the kindred Semitic religions" we need not, therefore, deny one jot or tittle of their later spiritual teaching, any more than we need believe that man is still a monkey because in his life's process he passed through the monkey stage. We should not hesitate to recognize the many foreign elements in the religion of Israel, for Israel so "regenerated and stamped with its own identity what it borrowed from others, as to bear indubitable witness to its own vital power and invincible capacity for assimilation."*

Let us divide our subject into two parts :=(1) The origin and external form of prophecy. (2). The growth of its spiritual content.

(1). The inquiry into the origin and early history of prophecy among the Hebrews is beset with great difficulties inasmuch as we have no records contemporaneous with the period of which we are to treat and our results must, therefore, at the best, be uncertain. True the word nabi is used by the Biblical writers to distinguish a personage as ancient as Abraham but the proper inference from such use of the word is not that Abraham was a real nabi but only that the writers have fallen into an anachronism, as any historian, writing of a time long past, is apt to do. The proof of this is to be found in a note in I Sam. IX, 9: "He that is now called a prophet was before time a seer." In this case, if a knowledge of the etymology of the word nabi could be arrived at with any certainty, it would be of great importance as an illustration of the conception of the prophetic function among the Israelites. But such knowledge is perhaps impossible, for each Hebrew expert seems to have an etymology of his own. Cornill traces it back to the Arabic in which the primitive Semitic type has been preserved most purely and finds its source in a root (naba'a) meaning "he who proclaims something definite," "the speaker who discourses not of himself nor of anything special to himself but as an agent for some other person." He points out also that

*Cornill.

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this early signification has been preserved in the Hebrew in such a passage as Ex. VII, I. But, in the first place, according to the Arabic lexicographers the root *naba'a* itself has very various meanings among which it is difficult to find one that can be regarded as central; and in the second place, Ex. VII, I cannot be taken as giving the meaning of the word but only as evidence of the conception among the Israelites of the prophet's function in relation to God. The word seems to have no root in Hebrew of the historical period and we must suppose either that it has survived from some remote antiquity or that it is borrowed. It can hardly be a very old word inasmuch as it is not a common Semitic term, and as the *nebi'im* were common to Israel and the worshippers of Baal, it is unlikely that the word is older than the settlement of the Israelites in Canaan. In this case it would be of Canaanite origin and its etymology becomes comparatively unimportant.

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If the Hebrew word for prophecy is only a borrowed word, we see at once that prophecy is wider than Israel : in truth there was no ancient people but believed in the power of certain personages to consult the deity and reveal his will. It will be necessary, therefore, to study briefly the prophesying or soothsaying of the general Semitic world, for only in this way can we get at the features of Hebrew prophecy in the time when "he that is now called *prophet* was called *seer*." The pertinency of this inquiry to our subject will be seen when we remember that the prophet who inherited the function of the seer did not for many years free himself absolutely from the seer's habits and the seer's tools.

If the prophet among any ancient people is the man who consults the deity and reveals his will, his prophetic utterances will depend on his conception of the deity : accordingly we must first see what the early Semitic conception of the deity was.

Among the Semitic peoples each tribe or nation, while not denying the existence of the gods of other tribes or nations, had its own tribal or national god. This national god in each case was regarded as the divine lord and often as the divine father of his nation. Other gods had the seat of their power in other lands and were his rivals and the enemies of his people. He was, therefore, to be looked to in all national concerns and had the right

to receive national homage. National misfortune was ascribed to his wrath, and national success to his favour. He was the ultimate director of all national policy-among other Semitic nations as in Israel. Chemosh commanded Mesha to assault this or that city and drove before him the King of Israel, just as lehovah commanded Joshua to attack Ai and drove before him the people of that city-the parallelism extends not only to the ideas but to the very words. [ehovah like other gods appears with thunder and lightning. He bears the same titles-Melek, Adon, Baal. He holds a special relation to special places. The operations of his sovereignty go forth from Sinai or from Zion or from some other earthly sanctuary where he is nearer to man than on unconsecrated ground. He is propitiated by the same offerings and in the time of war orders the sacrifice of the captives and the spoliation of the cities with the same relentlessness, (see e. g. Joshua VIII). Not only was the god the director of all national policy: he was also in close connection with all the practical interests of their common life. Accordingly they' asked of him the detection of criminals, the discovery of lost property, the settlement of civil suits, when war should be waged and by what tactics.

This need for consulting the deity created of necessity ways and means for such consultation, which may be summed up under two heads :---

(1). Visions either in a time of ecstasy or sleep. (2). Signs or omens such as the whisper of trees, the flight of birds, the passage of clouds, the movement of stars, the casting or drawing of lots, the shape of the entrails of sacrificed animals.

So much for prophecy in the general Semitic world. Our next question is, "have we any traces in the early history of Israel of the use of such crude means for consulting the deity as we have just mentioned ?" We have. The Hebrew prophet gains influence by the wonderful things he does. Moses uses rods like the magicians of Egypt; he holds up his hands that Israel may prevail against Amalek. Joshua casts lots to discover a criminal. Samuel dreams in the sanctuary and discovers the lost asses of Saul for a fee. David keeps images in his house (I Sam. XIX, I3), and consults the Ephod (I Sam. XXIII, 9), and accepts as a sign of battle "the sound of a going in the tops of the mulberry trees" (II Sam. V, 24).

What then was the function of the scer in early Israel? If Saul was troubled when he went to Samuel to enquire about his father's asses because he had no fee, and if Samuel, as we may justly suppose, was among the best of the seers of his time, we may conclude that the Israelitish seers were honoured and consulted, not as afterwards on account of their zeal for the worship of Jehovah, but on account of the knowledge of hidden things which they were believed to possess and therefore that they did not rank much higher than the soothsayers among other nations It is true that the Old Testament has little to say of antiquity. in favour of the soothsayers of other nations, (see e. g. Deut. XVIII, 10 ff), but the contrast which later prophetic writers could draw with justice is no proof that such contrast had always In the eighth century prophecy had come to the full existed. consciousness of its vocation and to reflection as to the best way of fulfilling it and to such reflection the soothsaying or prophesying of the earlier seers must have appeared altogether childish and inadequate. But reflection comes late in a nation's history and we must not suppose that the views of inspiration held by the later prophets were identical with those held by the seers three and four centuries previous. Nor are we denying a spiritual element in the work of the Hebrew seer, even if we admit that his tools were those of the ordinary soothsayers. Doubtless those tools offered countless temptations to professional fraud and avarice, to malice towards indivduals, to subservience to the powerful and to the insincerity of routine so that their effectiveness always depended on the moral insight and character of the prophet himself. But in spite of their crudity they offered numerous moral opportunities to those that used them. "The prophet," says Prof. George Adam Smith, "was trusted to speak in the name of deity. Through him men believed in God and the possibility of a revelation. They sought from him a discrimination of evil from good. The highest possibility of social ministry lay open to him : the tribal existence often hung on his word for peace or war : he was the mouth of justice, the rebuke of evil, the champion of the wronged : and when such opportunities were present, can we imagine the spirit of God to have been absent ?"

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But though the early Hebrew prophet had recourse to the same crude instruments of divination as other Semitic prophets and though his deity had the same external characteristics as the deities of other Semitic nations, we soon discover that the content of his prophecies reached a moral and spiritual elevation which has no parallel elsewhere in the Semitic world. We have just said that the purity or the impurity of prophecy depended on the moral insight and character of the prophet himself and therefore the purification of prophecy was sure to follow upon the moral elevation of the prophets and the spiritualizing of their conception of God. Now, whatever explanation we give of the fact, we know that there were moral influences at work in Israel which were not found among other Semitic peoples. We do not know why, of two boys born of the same parents and reared in the same home, one should be possessed of moral and intellectual energies which force him from his quiet home into the university and then into the leadership of some great movement of his time, while the other is content to remain at home and follow in the footsteps of his father—but we know that it is so. To be too inquisitive as to the reason would be to suppose that man was a sort of machine which could be taken apart, piece by piece, and examined. Likewise to insist on asking why the religion of Israel evinced from the very first an ethical force shared by no other Semitic creed would be to suppose that our psychological knowledge was much more profound than it is. We cannot tell whence the wind cometh or whither it goeth but we can see the trees shaken by it ; so we cannot tell, with anything like mathematical precision, whence the new spiritual impulse came into the souls of the Hebrew prophets, but we can see that it did come by the spiritualizing of their conception of God and the sloughing off of their old name and their old habits.

The first great transformation and the real rise of Hebrew prophecy came in the time of Samuel. Hitherto the prophet had been called *seer (roeh)* but now he is called *prophet (nabi)*. Along with the name went also to a large extent the implements of soothsaying and the ritual of religion. The priests still preserved the ephod, the teraphim, the lot, the urim and thummin, but henceforth the prophets were mainly free of all such ancient forms of oracle. They were also free of the ritual of the local sanctuaries and had a fair field for the cultivation of prophecy along moral and spiritual lines.

What then took the place of the old habits and the old instru-Instead of the solitary seer we now find bands of ments? strolling prophets. Instead of the teraphim, the ephod, and the enchantments we have singing, playing upon instruments, dancing, frenzy, tearing of clothes and prostration. Prophesying is a united exercise accompanied by loud dance-music, is marked by strong excitement and sometimes acts contagiously. The person seized and fired by the deity falls into an ecstasy : now into so strong a transport that he loses all command of himself and does things worthy of a madman, (see e.g. I Sam. XIX, 24, "Saul stripped off his clothes also and prophesied before Samuel in like manner and lay down naked all that day and that night," etc) ; again into an excited, elevated frame of mind in which he expresses with power and emphasis the thoughts revealed to him inwardly by the deity. Such operations of Jehovah were recognized as produced by a divine afflatus and the man who experienced them was called a man of the spirit.

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One of the phenomena of ecstasy requires further mention and elucidation, viz.: the vision. "In some quarters," says Prof. Robertson Smith, " a great deal too much stress has been laid upon the prophetic vision as a distinctive note of supernatural revelation. People speak as if the divine authority of the prophetic word were somehow dependent on or confirmed by the fact that the prophets enjoyed visions. That, however, is not the doctrine of the Bible." If we are to understand the significance of the prophetic vision two things must be kept in view : (1) the fact that the Israelite recognized no second causes and (2) the manner in which truth worked its way into his conscious-As to the first point the Old Testament is full of proof ness. that the Israelites ascribed all phenomena to the direct and immediate action of Jehovah. The imagination played a larger part in their intellectual life than the understanding and hence they were utter strangers to the scientific habit of thought, by which one phenomenon is traced back to another. As to the second we must not suppose that truth came to the Israelite as it comes to most of us, through wide reading and profound reflection. He was a seer, gaining truth by the first leap of intuition; truth came to him suddenly and of its own accord and often with such power as to overcome and command him. Consequently he

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did not regard his vision as the fruit of his own study and reflection but explained it as the result of direct inspiration from above. He would have considered it atheistic even to attempt a physical or psychological explanation of it. Keeping these two facts in view we will not be inclined to lay undue stress upon the prophetic vision, and, while admitting that we can never adequately analyze the consciousness of the prophet, we will nevertheless have regard to the physical and psychological antecedents of that consciousness and make bold to see in the state of national tension, in which the prophet lived during the time of Samuel, a partial cause of his ecstatic and visionary condition.

The same phenomena, in fact, are to be observed to-day among the dervishes of Islam. The action of Saul which we have already quoted from I Sam. XIX, 24 is precisely identical with what Ibn Khallikân relates of Kûkubûry that he used, under the influence of religious music, to become so excited as to pull off part of his clothes. But we need not go so far in search of a We have all attended Christian churches where frenzy parallel. and loud shouting and prostration were the effects of the religious exercises and, however crude and unintelligent the people appeared to us, we had to admit that they were at any rate sincere. But while the modern Hornerite works himself into a transport by means of a selfish passion for his own salvation, the Hebrew prophet was a patriot and an enthusiast for the people; while the Hornerite denounces all interest in politics, the Hebrew prophet took an active part in the political life of his time and by so doing avoided the unhealthy results of religious subjectivism.

The rise of the prophets (*ncbi'im*) in the time of Samuel was due, historically, to a great burst of indignant patriotism. For many years the oppression of the Philistines had been growing more and more intolerable. The indignation of the Israelites, though suppressed, had been growing in proportion and it took the form, not of war, but of an increased interest in the service of Jehovah. One wave of this intense religious feeling found expression for itself in the formation of a religious order known as the Nazarites, who dedicated themselves or were dedicated by their parents for the whole of life to the service of Jehovah and vowed to let the hair grow long and to abstain from spirituous liquors. It can scarcely be accidental that the formation of this order is related in the midst of the narratives dealing with that time of political depression. Nor, if we are to attach any significance to the connection between the Nazarite and the prophet which Amos assumes in chap. II, vv. II, I2, can it be by accident that a company of prophets is spoken of for the first time in the narrative of Samuel's life. It is very probable that this association had just then been formed. A wave of more intense religious feeling than usual had passed over the land and roused some of the worshippers of Jehovah to a state of ecstasy. This ecstasy had communicated itself to a larger number of them and had led to combinations of the enthusiasts and to exercises which kept up or revived their enthusiasm. One company established itself in the neighborhood of Ramah and of this company Samuel was the ruling mind to the end of his life.

Now if we ask ourselves why a new religious order had to be created for the embodiment of a new religious feeling, our answer must be that there was little room in the ordinary life of ancient Israel for intense religious excitement. The common acts of worship coincided with the annual harvest and vintage feasts or similar occasions of natural gladness and these were not such as to raise great enthusiasm. Consequently the religious emotions of the Hebrew were never raised to their highest, save when he was fighting the battles of Jehovah, and, as Jehovah was closely connected with the nation and the land, deep religious emotion and patriotism were synonymous. Therefore when the Philistine oppression had raised the religious fervour of the Israelites to extreme tension, some new religious order and exercise had to be created to give expression to this fervour. If they had found a captain at that time to lead them against the Philistines, their patriotism would have made an outlet for itself on the battlefield but not having found such a captain, there was no other course open but to create an enthusiastic religious order. And when we remember the moral influences which have issued from that order to bless the world, we may be grateful that the warrior Saul did not appear on the scene any earlier.

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When the political conditions which produced this mode of prophecy passed away, the heat of prophetic enthusiasm necessarily cooled but, thanks to Samuel, "the prophetic order had done more than organize a new form of spiritual excitement."

Left to itself the enthusiasm might easily have run to all sorts of extremes, but the old 'seer,' accustomed all his life to practical work, and awake to the great interests of the nation, tided it over its time of transition and danger and transformed it into a great practical force in the national and religious life. The prophetic associations embodied an intenser vein of feeling both religious and national than had ever been expressed before in the ordinary feasts and sacrifices at the local sanctuaries. The struggle for freedom, for which the prophets were largely responsible, called forth a deeper sense of the unity of the people of the one Jehovah and in so doing raised religion to a loftier plane. Moreover the prophetic societies, having had most to do with the institution of the human sovereignty, preserved the traditions of that institution and naturally continued in close touch with it. In this way they gained an established footing in Israel and " came to be recognized as a standing sacred element in society." They upheld the laws of divine righteousness in national affairs and served as a check on the kings who were not answerable to human authority. Nathan counselled and rebuked David : Shemaiah warned Rehoboam against going up to fight against Israel : Ahijah stirred up Jeroboam and Northern Israel to revolt against Rehoboam and afterwards overthrew Jeroboam's dynasty. At the same time they maintained their old habits. The ecstasy still survived and they still lived in communities. Elijah and Elisha had still upon them the hand of the Lord, as the esctatic influence was called : Elijah when he ran before Ahab's chariot across Esdraelon, Elisha when by music he induced upon himself the prophetic mood.

The weaknesses of this mode of prophecy are obvious. First : ecstasy is always dangerous to the moral and intellectual interests of religion. When these elements are not present, it is apt to descend to drunkenness and the sexual passion and we have abundant evidence that this was its outcome with many of the strolling Hebrew prophets. This is why Amos cries out with such an emphasis of disgust that he is neither a prophet nor the son of a prophet. Second : the prophets' connection with public affairs made them flatterers rather than rebukers of those in high places. There have always been those in the Christian church who would prophesy smooth things for reward and we need not wonder, then, that, as I Kings XXII tells us, four hundred prophets should flatter Ahab and Jehoshaphat promising them success in war, while only one—Micaiah—had the courage to speak the truth. But in spite of its obvious weaknesses this mode of prophecy did develop strong men who guided the affairs of the nation towards moral and religious ends and by their rebuke of sin in high places kept the conscience of the people keen and active.

Between Elijah and Elisha, the last prophets of this order, and Amos the first great writing prophet, Assyria began to make herself felt in Syria and Palestine and the important events which followed freed prophecy from all sensuous elements such as enchantments, frenzy and prostration, and transformed it into a purely moral and religious force, a combination of reflection and impulse such as can be found nowhere else in the world.

2. The growth of the spiritual content of Hebrew Prophecy.

We have seen already that the Hebrew prophet was not a philosopher, seeking truth by reading and reflection, but a seer, reaching truth by vision and intuition. Visions came to him, not as he sat alone in his study "far from the madding crowd," but while he was in the thick of some national or religious struggle, of which he became the interpreter and the muothpiece. Hence the spiritual lineage of the great writing prophets is to be found in the national crises preceding them rather than in the oracles of their prophetic forbears. In Israel's history, as in that of most nations, there were creative periods which produced great men and lifted the national life to a higher goal. We need not discuss here the question whether the period creates the great man or the great man the period, but we know that the nation which has lacked either has never taken a prominent part in the world's history. By the providence of God Israel lacked neither the creative period nor the great man and therefore while his Semitic kinsmen remained at a stand-still Israel advanced step by step from moral childhood to moral manhood and became the religious teacher of the world. Before the coming of the Assyrian and the rise of written prophecy in the eighth century B. C., there were two great creative periods, viz.: the Mosaic and the Davidic, and we must study these in order to discover the moral antecedents of Amos, Hosea and Isaiah.

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The time of Moses is invariably regarded as the properly creative period in Israel's history. First of all Moses may be said to have created Israel's sense of national personality and to have founded this sense of unity on religion. By giving to Israel a national Deity, Moses cemented together the different tribal elements, for, although it became apparent after the settlement of the tribes in Canaan that their formation into one nation was not guaranteed by their service of a common God, still the consciousness of a peculiar and intimate relationship between Jehovah and the tribes of Israel never died out and served ever afterwards to unite them against other nations and other gods. Moses did not create the faith that "Jehovah is the God of Israel and Israel is the people of Jehovah" but he impregnated it with new emotion and made it the fundamental basis of the national existence and history. Through him it was binding on Israel to serve only Jehovah; through him the religious instinct concentrated itself on one object and thereby received an intensity which prepared the way for the ethical monotheism of the prophets. This one and only God of Israel was not a metaphysical entity. Moses and the men of his time did not see the absolute separation between Jehovah and nature which became the great burden of prophetic teaching at a later period. To him the light and fire were more than symbols: they were the necessary channels of Jehovah's revelation of himself. "Alike what was done by the deliberate purpose of Moses and what was done without any human contrivance by nature came to be regarded in one great totality as the doing of Jehovah for Israel."* So close and intimate was the relation of Jehovah and his people that no distinction was known between divine and human law; both were God's institutions and commands. The Israelite could not conceive how any valid law might be merely of human formation or of human discovery. In his eyes everyone who sinned against the civil law sinned against God.

The second great contribution of Moses to Israel's nationality was the legislation by which he made God accessible in practical affairs, or, in other words, by which he connected the religious idea with the moral life. To him who had been the soul of their first great national movement—the exodus from Egypt—the

*Wellhausen.

Israelites naturally turned in all subsequent difficulties. In the desert and during their stay in the trans-Jordanic regions Moses stood at the head of the tribes. He was the representative of the Deity : in judicial proceedings his sentence was final and to him were brought all affairs with which the people could not cope. To him were delivered at Mount Sinai the commands of God for the further regulation of the common interests and by him the tribes were bound over to observe them. Being a man of profound patriotism and religious zeal he exercised his judicial functions neither in his own interest nor in his own name but in the interest of the whole community and in the name of Jehovah. Moreover he connected these functions with the sanctuary of Jehovah and made them independent of his own person, thus laying a firm basis for consuetudinary law. In this way he impressed a chosen few with his own conception of Jehovah's nature As the book and of His will regarding Israel's relation to Him. of Judges shows, the popular religion remained in many respects the same as before ; still under Moses' influence Israel took a step forward, if it was only one step. Through the Torah he gave a definite positive expression to their sense of nationality and their idea of God. Jehovah was not merely the God of Israel; as such He was the God of law and justice, the basis of their national "Jehovah, alone the God of Israel, who suffers consciousness. no one and nothing besides Him, who will belong entirely and exclusively to this people, but will also have this people belong entirely and exclusively to Him, so that it shall be a pure and pious people, whose whole life, even in the apparently most public and worldly matters, is a service of God, and this God source and shield of all justice and all morality." This summary by Prof. Cornill seems to be not altogether inadequate as an estimate of the contribution made by Moses to the religion and nationality of Israel.

For those who may feel that the literary contribution of Moses to Israel has not been sufficiently emphasized, the following remarks from Prof. A. B. Davidson, whose sanity of judgment is well known, may be interesting and assuring. "It may be felt by some to detract from the greatness of Moses to conclude that he was not the author of every part of the Pentateuch. Yet, on the other hand, does it not raise him to a higher level and

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place him somewhat on the same plane with our Lord? Jesus wrote nothing. His life was His work. Himself was the inspiration and the new seed thrown into the life of mankind. Of course Moses wrote something, the ten commandments at least and who can say how much more, both of civil and social law and ritual observance? But his main work may have been his life, the inspiration of his person, the new spirit which he breathed into Israel, setting it aglow with the fire that burned in his own heart, and the consciousness which he awakened in it of its destiny and its mission in the moral history of mankind."

The second great creative period in the history of Israel was the Davidic. We have already stated that Moses created Israel's sense of national personality, for the Israelites could not, otherwise, have maintained their tribal unity in the midst of the Canaanites, a people superior to them both in numbers and in civilization. But Moses did not give any outward political expression to this inner unity. That work was left for David, David captured Jerusalem and made that city the seal and symbol of the unification of the Hebrew tribes. He first welded the settled tribes into a kingdom, made them into one ordered people and one organic working whole. He created the nation and spread its rule to distant borders on the North, South and East. To the mind of the later prophets the David age of the Israelites was a time of great religious revelation and we must, therefore, ask what divine revelation did come through David. We may discover that revelation in the new word for God which came into use in and just after the days of David, viz: " Jehovah of Hosts," " [ehovah Sebaoth." David, as we have seen, was the first man to give Israel a unique place among the nations of the earth. He conquered all the peoples round about him and by thus extending the sway of Israel broke down the tribalism and extreme nationalism of former days and enlarged the self-consciousness of his subjects. This extension of their political horizon also quickened the intellectual and religious instincts of the Israelites and the best men among them soon were prepared for the revelation that the victory of one God over many was the establishment of a divine over-lordship. From the fact that one nation could rule over all nations as David had exemplified, the prophets then concluded that there must be one over-lord over all gods

and all peoples. In brief, then, the David-revelation, as interpreted by the prophets, was: "Jehovah is supreme Lord over all other gods, powers and nations."

The growth of the spiritual content of Hebrew prophecy may, therefore, be summed up thus : "As God of the nation, Jehovah became the God of justice and right; as God of justice and right He came to be regarded as the highest power in heaven and earth." The next step is to regard him as the only power in heaven and earth but as this step was reserved for the great prophets to take, and as their writings will be discussed in other papers, we need not proceed any further in our history.

R. J. HUTCHEON.

When the evening is come, I return to my house and enter my study, but at the threshold I lay aside my rustic garb defiled with dust and dirt, and I put on royal and courtly attire, and thus worthily clad I enter the ancient court of the ancients, where being graciously received by them, I feed on that food which is mine alone, and for which I was born. There I am not afraid to talk with them, and to question them of the reason of their doings, and they of their good-And thus for the space of four hours, I feel no ness answer me. weariness, I forget every trouble, I fear no poverty, and death itself cannot affright me, for my whole being has passed into them.

Machiavelli ; Letter to Francesco Vettori.

THE ECONOMIC CONDITIONS AND DEVELOPMENT OF LABOUR IN GREAT BRITAIN.

DURING the course of this century the whole industrial framework has been radically reconstructed and more changes have taken place, than for the preceding eighteen centuries. Concurrent with the enormous growth of the population and of the empire, this age has witnessed a vast expansion of commerce and a rapid exchange of a rural for a town life. Doubtless the use of steam, gas, electricity and machinery of all kinds in manufacture and in locomotion, accounts for the revolution.

Nothing can be more fascinating than the story of corresponding increase in the material wealth of the empire—how the set of every sun finds the inhabitants of the British Isles two millions of dollars richer in houses, railways, shipping, bullion, land, capital, than they were at its rising. Books might be filled with the records of discoveries made in Science and Art, of the birth of new ideas and their application to the wants, conveniences and comforts of mankind, of the rise of industries and the growth of individual and of corporate wealth.

But of greater interest to us than the story of the *production* of wealth is the manner of its *distribution*. If it is true that the social economist has studied the former more than the latter, no wonder he has been hated by the labourer, and we will not repeat his folly. If it be true as has been so often asserted that the natural and necessary tendency of the modern industrial system is to confine its benefits of progress more and more strictly to the few and to push down the masses into ever deepening poverty, then we can sympathize with those radical reformers who declare the industrial framework of society to be essentially unjust and who clamor for its dissolution. For how can we countenance a system which makes such a hideous state of affairs possible and prevents the bulk of the people, those whose hands guide the machinery of the world, reap its harvests, distribute its commerce and convert the raw material into saleable products, from sharing in the general advance? Of what advantage to the farmer that the machine cuts, binds, winnows and bags thirty times more grain in a day than his father could with a sickle, unless his own loaf is cheapened thereby? Of what avail to the weaver who stands at the spinning machine if its increase of six hundred per cent. in power over the old wheel has not given him cheaper and better clothes? Therefore if the increase of wealth has only served to make the rich richer, and has not like the rain fallen on the poor as well as on the rich, better if it had never been created; for the display of luxury tempts the birth of new desires and irritates by breeding discontent.

However I am persuaded that an examination will show that the labourer has been made at least a partial partaker of the increase of material wealth, and that his condition is decidedly better than it was a hundred years ago when the eminent manufacturer accompanied by his children and apprentices would be in the workshop at six o'clock in the morning, after partaking of a breakfast which consisted of porridge, made of water and salt with a little oatmeal. It will not be necessary to narrate any of the shocking details of mining and factory and workhouse life to show that in comparison with the past the economic condition We will however glance at has undergone a vast improvement. some facts which show that the gulf between the rich and poor is not widening, that the middle class is not being squeezed out and that the chance of making a bare living is not becoming more and more uncertain ; but that the very reverse is the case. Certainly pauperism has not yet entirely disappeared and too many yet are starving with the rich clusters of plenty hanging in their sight. When we think of the thousands in the city of London who are burrowing in cellars and shivering in garrets, uneducated, miseducated, incompetent, entering into the mad conflict of life like soldiers without weapons ; when we consider the helpless crowds who are the victims of our rapacious, grinding, heartless civilization; we see that our modern industrial system has not absorbed that unfortunate and melancholy army which staggers on its way to the grave under the tattered banner of poverty. But it is some consolation at least to know that the pauper class is becoming less numerous relatively to the whole population, having

been reduced during the last fifty years almost fifty per cent. (from nine in every two hundred of the population to five). Certainly too the selfish principle yet underlies and permeates the structure of society and perhaps as never before money is worshipped by devotees devoid of pity, and capital is determined to wring from labour all it can and men are ready to prey upon and plunder their fellowmen ; yet an examination will show that the state does not unconcernedly look on to see its citizens pauperized, that legislation has an ever increasing interest in the welfare of the masses, that competition is being regulated and that many of the accursed evils which have nestled in the bosom of our civilization may be eradicated and removed. The study of sociology is in its infancy. And as after ages of pain and thought it has been discovered that government is for the well being of the many and not of the chosen few whose function it is to rule, so it is gradually being found out that the energies of commerce and trade are to be directed towards the happiness of the many and not for the lordly affluence of the few; and when this is fully discovered the rich gifts of Providence will be distributed more equally among the masses and the labourer will then enjoy his proper share. Indications are that this revolution has already begun and will be accomplished, without violence, by the quiet steady working of forces aleady operating in society. Fifty years ago Great Britain stood face to face with a crisis solvable to all appearances by force alone, yet through the quiet working of economic forces along constitutional lines a vast improvement Our appeal is to statistics and to "stubborn has taken place. facts." Fortunately for us we can take advantage of and use the work of others who have carefully covered the field. W. H. Mallock in a book recently published presents these facts, most interesting for all, and most startling for those whose outlook is He shows that rapid as has been the increase of pessimistic. population as a whole from 1850 to 1880 the increase of the classes who pay income tax has been far more rapid. The population increased from 27 to 35 millions. The income taxpayers increased from $1\frac{1}{2}$ to $4\frac{7}{10}$ millions or in the ratio of 27 to 84.

Thus the growth in wealth of the rich and the middle classes does not mean the growth of fortunes already established, but the constant creation of new fortunes by individuals rising

from the ranks. Those whose incomes are below f_{150} per annum (the working class) increased by 15%; those whose incomes are between £150 and £1,000 (the middle class) increased by more than 300%. Of the millionaires (whose total increase of wealth if divided among the people would only give each inhabitant one shilling per month) seventy-seven of their incomes were derived from business which added to the nation's wealth; whilst the working classes increased in wealth very much faster than any other class in the community, both in the aggregate and in the average individual income. In 1860 the aggregate income of the labourer was equal to the aggregate of all classes in 1800 (after deducting the increase of population) ; and in 1880, after making this deduction their aggregate income was more than equal that of all classes in 1850. Thus, he shows, the working classes in 1860 were in precisely the same pecuniary position as the working classes in 1800 would have been had the entire wealth of the kingdom been in their hands. And the same classes to-day are in a better pecuniary position than their fathers would have been could they have plundered and divided between them the wealth of every rich and middle class man at the time of the building of the first great Exhibition. So that the miracle of redistribution dreamed of by the socialist has actually twice taken place in three generations, without any attempt at revolution and in consequence of the very economic tendencies against The fact is that nearly the whole of the adwhich they protest. vantages gained during the past half century have gone to the working class. His conclusion is that " on nine tenths of the population our modern industrial system has effected great good and should not be interfered with because the one tenth has not yet been reached, any more than a great steamer with six hundred passengers should be wrecked because sixty of them had bad accomodation in the steerage."

Another authority, than whom there is no more reliable investigator of social statistics in Great Britain is Sir Robert Giffen, statistician to the Board of Trade, whose statement is that during the last thirty years the general wage of artizans and weavers has increased seventy per cent. whilst their hours of labour have decreased from ten to nine per day. Mulhall in the "History of Prices" shows that the condition of the working

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classes has so much improved that they consume twice as much as they did in 1850, and that the purchasing power of money is greater. 140 lbs. of bread can be purchased as cheaply as 77 in 1860, and 15 shillings will now buy as much manufactures as 20 would in 1850. So taking increased wages and food values together the English workingman can purchase 21 per cent. more of the necessaries of life in beef, butter, wheat, sugar and coal, that he could in 1840, and after allowing for enhanced rent there would still be a gain of 10%. By looking in other directions we find abundant confirmation of this. The Savings Banks show that the amount deposited there per inhabitant rose from \$7,00 in 1860 to \$11,25 in 1882. In the vitality of the people there is a great increase (5 per cent.); and how shall we compare the educational facilities of 50 years ago with those of the present ? In 1839 the first grant to education by the government inserted at the immediate suggestion of the Queen was \$150,000. In 1871 the system of education was nationalized. Since that time what a large number of universities and colleges have been established where workingmen can receive a technical education at a nominal fee, thus placing the key which unlocks the door of knowledge in Add to this the free libraries, museums and parks, their hand. the orphanages, hospitals, asylums and charity schools, all of which are direct contributions of wealth to poverty for the alleviation of sickness, accident and death. Consider too the beneficial legislation, whose scope is ever enlarging, directly in the interests of the labourer both to protect his natural rights and to increase his opportunities as e. g. the repeal of the corn laws ; the various factory acts; the long series of enactments for the better housing of the labouring poor, their defence against accidents occurring from defects in machinery or from the negligence of the employer or his agents; the various laws for the enforcement of sanitation in shops and factories and for the inspection of mines; the fostering of co-operative effort, and of those great Trade Unions which have collected millions of dollars for the purpose of giving effect to their views of society, and one wonders if there is anything in history to correspond with the improvement in the labourer's condition. No one contends that things are yet as they should be, that the labourer receives his full share. The civilization of to-day will probably appear as crude to our grand-

sons as the civilization of fifty years ago does to us, but surely it is not too much to say that the labourer's condition is on the path to improvement, and that there are forces at work in society which may continue to uplift and bless. What are these forces which have already done so much and from which we may yet expect a great deal?

I. Emigration. It is easy to see how this will relieve congestion; it is not so easy to think that not until 1824 was freedom given to the skilled artizan to emigrate.

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2. The introduction of machinery. Although at the time this brought the severest privations to the labourer, whose wages were lessened, if indeed he was not thrown out of employment altogether, whilst the profits of the capitalist were enormously increased, yet ultimately the introduction of machinery operated favorably in cheapening products and in bettering wages. There are three ways in which wages have been increased along with; although they may not exist concurrently with, the introduction of machinery: (I) By the restraints imposed by law on the employment of labour which thus prevented children from entering into disastrous rivalry with their seniors. Infant labour was at its worst and greatest height before any one thought of a factory. The Factory Acts not only prohibited the employment of many children, but regulated the hours of labour for all.

(2) By the restraints on labour imposed by the joint action of the labourers themselves. Though this joint action was very slow in operation at first, and though serious mistakes were made before the labourer discovered the proper use of his new powers, great good has been accomplished.

(3) By the competition of capitalists as producers. But as all these causes were slow in operation and as the labourer looked only at the probable immediate effects of his work being performed by a machine without a heart to feel, or a stomach to be fed, or a family to be provided for, it is not much wonder that he regarded the adoption of machinery with the most profound hostility. Yet facts show even here a great gain to the labourer. In employments where there is little or no machinery wages are lowest. Where machinery exists there is greater demand for the product (owing to the lower price), more regular employment of the labourer, and in the course of time greater remuneration. 3. The already mentioned growth of humanitarian or philanthropic sentiment, crystallized in legislation regulating the kind of labour to be employed, and the hours of labour, the ventilation and sanitation of factories, etc., resulting generally in protective laws for children and others, and in securing opportunities for education.

4. The education of the labourer has been a great force. New energy and self reliance have been developed and the people gradually improved as their environment was improved. Otherwise an improved environment would have been only temporary. A labourer who works simply with his muscle may be replaced by a machine or a horse or a Chinaman. Hence the necessity of development from within through educational and moral forces. You cannot take a nation and by some magic bath restore it instantaneously from decrepitude, disease and dirt, from vice and ignorance to manliness, health, virtue, self-respect, sobriety, knowledge, forethought and wisdom. Education is a gradual process and will ever be of increasing power as an uplifting force.

Free trade. History demonstrates clearly that protection 5. against foreign competition is a great wrong done to labour. It swells the profits of the capitalist, cripples the energy of the workman by narrowing his market, shortens the means of the consumer by making that expensive which he wishes to purchase. One lesson of enormous value which political economy teaches is that any hindrance put by law or custom on the purchaser's market is a wrong to every one, to the consnmer first, the labourer It is only because the capitalist is next and the capitalist last. touched last and in the meantime may reap enormous profits that protection exists. Undoubtedly free trade has made England the great manufacturing centre of the world. One wonders if it would not be worth the study of our statesmen to find out how tar protection in this country is responsible for the booming of our cities, the weakening of the resources and the consequent decrease of our rural population, and thereby the increase in our cities of those who cannot find employment. Nature demands a penalty for every violation of her laws and any artificial obstruction in the natural course of trade will make a sore upon the body politic.

6. Trade Unions. A trade union is a continuous association of wage earners for the purpose of maintaining or improving their condition. For a long time their history was one of unmitigated persecution. Men said "let there be freedom of contract, let wages adjust themselves." And so long as individuals are dealing with individuals this method works fairly well. But changed conditions, brought on largely by the introduction of machinery, necessitated aggregations of capital and combination of employers, with the result that competition was no longer free. One man is powerless against a thousand. Hence labour was obliged to combine. In 1824 a bill to legalize trade unions passed through the house quietly and rapidly without debate or division. In spite of the financial panic of 1825 which dashed to the ground the high hopes of the promoters and in spite of the vigorous attempts made to destroy them, labour organizations have been extended on a large scale and are here to stay, freed from many of the imperfections which characterized them at an earlier date. What is their value? That man is surely blind who cannot see in the antagonism between class and class which strikes, lockouts and labour wars have begotten (not to speak of the tremendous loss in wages and profits), a real and serious danger. Yet in face of the fact that capital has long been organized, haughty, arrogant and oppressive trade unions must be recognized as necessary until the principles of brotherhood are recognized. There can be no doubt but that they have been the best friends of labour and to them is largely due the improvement in the labourer's con-Where organization is not found the horrible evils of Inventions which should dition. the sweating system are found. materially lessen the toils and increase the gains of the labourer as for example in the case of tailors and seamstresses, have simply swelled the profits of the employers, through lack of proper organization on the part of labour. One is pleased to see that as these great societies of skilled artizans have been built up with their centralized administration, their trained staff of salaried officers, their financial strength and very large and permanent membership, a new model of organization has been adopted whereby brotherhood is taught, friendly benefits secured, and industrial diplomacy substituted for the ruder methods of class war. Doubtless the beneficent effects of this new idea were very

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manifest in 1889 when the current of social propaganda was turned from revolutionary to constitutional channels and its aim clearly defined as the securing of restriction of the hours of labour, the payment of wages weekly in current coin, and the establishment of Boards of Arbitration for the settlement of disputes.

7. Co-operative Industry. Concurrently with the introduction of machinery, which necessitated such combination of capital as provoked labour organizations, there became manifest the great evil of the industrial war about to begin. The solidarity of capital in one camp against the solidarity of labour in another camp meant serious danger to the solidarity of society. Accordingly reformers arose who aimed at organization of a better kind —co-operative control of industry and sharing of profits by workmen owning stock in the concern that employs them.

Personally, I regard this as the great remedy for the evils of of society, and that along these lines labour is to make its greatest advances in intelligence, organizing power, refinement and brotherhood. I know how history is against this idea, how terribly disappointed its promoters have hitherto been in this new social machine, on which so many high hopes were built, and how socialists such as Mr. and Mrs. Webb laugh at the idea of competition being abolished and ownership socialized by organized voluntary association to supersede state ownership. I know how difficult it is for the hand to recognize the superiority of the head, for the manual labourer to reward the brain worker, so that it has hitherto been impossible to secure the highest and best services in the management, and thus disastrous failures have resulted; I know, too, how difficult it is for the smaller capitalist to hold his own against the larger, how capital increases much more rapidly than in proportion to its size, and how the huge factory builds up its pitiless prosperity on the ruin of twenty smaller competitors; yet it is not too much to expect that the movement will outgrow these limitations.

As knowledge increases co-operative industry will contemplate and provide for evils which its first forms did not foresee, and the integrity of its principles will yet command its success. Of this scheme, as of none of its rivals, can it be said that it violates no principle of righteousness. The much vaunted single tax splits on the rock of Justice. No political economist in Great

Britain takes seriously Henry George's proposition to confiscate the hitherto recognized rights of the land owner. Trade unionism arraigns labour against capital, class against class. Socialism would weaken in the labourer those very qualities on which his industrial success rightly depends. But co-operative industry based on righteousness develops in man those very qualities which are the recognized pre-requisites of success :---

Brotherhood, by giving labour a principle of cohesion ;

Thrift, through the encouragement of small savings and the abolition of the credit system, which is almost as great a foe to labour as strong drink ;

Industry, by helping him to help himself. As the masses become more educated and intelligent it seems less likely that they will quietly submit to have their maintenance dependent on the caprice of the few. The labourer will not long be content to bloat a few monopolists. He will demand his share of the profits of the enterprise, and rightly so. And how will this be obtained ? By affording him an opportunity of investing his capital, his skill and his labour in the enterprise, whose profits he will be allowed This is socialism stripped of its false theories and to share. dangerous elements and visionary impossibilities ; this is Christianity applied to the purposes of trade and industry.

W. A. HUNTER.

THE CABOTS AND THE DISCOVERY OF CANADA.

I T IS just five years since our neighbours celebrated by the Chicago Exposition the fourth centennial of the discovery of America by Christopher Columbus, for it was on the 12th Oct., 1492, that he first sighted the land of this American continent. Columbus was a native of Genoa, one of the principal seaports of Italy, and an important republic.

The Crusades, if they did not create the great mercantile interests of the Italian republics, at least gave them a very great impulse. Previous to that period the great commercial routes from central, and even further Asia to the West, were from the North by the plains of central Asia to the Oxus and the Caspian Sea, and from India and the South by the Indian Ocean and Persian Gulf up the Tigris and Euphrates to the Caspian and Black Seas, and either by the Volga to central Russia and Novgorod, which became the great entrepot for northern Europe, or by the Dneiper into western Russia, or by the Danube into southern Europe; and from the Danube, generally by Ratisbon, there was a land carriage by Nuremburg and Ulm across to Strassburg, which became the great distributing point. It was essentially the Strasse-burg, the town on the road ; the diverging roads passing by the Rhine to northern France and Germany, as well as to the Netherlands and even England, or from Strassburg by the Rhone and Marseille to Italy and Spain, or into central France.

In the seventh century the eastern lands fell into the hands of the Saracens, and not long after all intercourse between the East and West was interrupted.

In the eleventh century, however, there was a very general awakening of the people of Europe to new political, or at least, municipal freedom. This is shown in the North in the case of the towns of the Hanseatic and Rhenish Leagues, of the Communes of Flanders, and of the Free Towns of England, or in the Communes of France, the Free Towns of Spain, and not less in the Republics of Italy. In the case of the towns on the coast, and along the rivers, the impulse tended to the development of commerce, and this was especially remarkable in the seaports of Italy, and, as the earlier Mahometan fanaticism had partially exhausted itself, commerce began to revive, and was diverted from the old land routes to the towns on the east coast of the Mediterranean. This re-opening of trade with the eastern lands received, however, a check of a more violent character through the new invasion of these eastern lands by the Turks, a rude Scythian horde from the high lands of the more northern part of central Asia. These put a stop to all commercial intercourse with the West, and it was the harsh treatment which the Christian pilgrims to the sacred places of the Holy Land received from the Turks that called forth the great movement of the Crusades.

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The Crusades were, perhaps, the strangest, yet most important movement of the Middle Ages. They were a series of adventures of at once a religious, political, social, commercial and chivalrous character, and though they certainly failed in accomplishing their purpose, yet their results on Europe were most important. They gave a much wider direction to the commercial enterprises which were just beginning in Europe, especially in Italy. Nearly all the towns along the coast of the Levant, from Antioch to Alexandria, fell into the hands of the Crusaders, and with these towns the Italian Republics, such as Genoa, Pisa, Amalfi, Beneventum and Venice opened up a most lucrative It was usual to assign a particular part of a town, as a trade. ward or quarter, either to a particular trade or commercial enterprise, or to the merchants of a particular town. Cities, such as Antioch, Beeroot, Jaffa, Alexandria, or even Jerusalem, were divided into several wards or quarters, each quarter being sometime separated from its neighbour by a wall with its several gates. The merchants of each quarter were generally allowed to occupy and transact their business under their own municipal laws, or under a distinct guild government. Unfortunately, the Italian Republics, like the separate States of old Greece, which they in many respects resembled, were kept apart by petty jealousies, and their life in their respective quarters in the eastern cities rather tended to foster these jealousies, and the result was almost continued wars between the seaport republics of Italy, attended by the ruin of nearly all these towns. Genoa and Venice protracted the struggle long after the other towns had fallen out.

The Crusades had failed in their purpose. Not only did the holy places remain in the hands of the Moslems, but the Ottoman power extended its authority over the whole of the East, and encroached on the States of Europe. All Greece became subject to it, and in 1450 Constantinople fell into its hands. Pisa lost all her eastern possessions. Pera, the eastern suburb of Constantinople, was lost, as was Caffa, at the north-east corner of the Black Sea, in both of which Pisa commanded an extensive commerce. Venice, with greater worldly wisdom, made a treaty with the Sultan by which his aid was secured in opposing the encroachment of the house of Aragon, which then held the two Sicilies, and by this same treaty Venice was allowed for some time longer to carry on trade with the East. But through the encroachment of the Turks on the eastern and northern shores of the Adriatic, threatening the independence of Venice, war again broke out. Venice was defeated, and became entirely shut out from trade with the East. Those towns along the eastern shore of the Levant which during the Crusades had encouraged the commerce of the Italians, now formed a cordon, closing against the West all ingress to eastern lands, and in this way Italian commerce with the East, which had been seemingly an inexhaustible source of wealth, was completely destroyed.

It was at this time, and under these circumstances, that the commerce with the East was driven to seek another direction. The vigorous and ambitious little State of Portugal rounded the Cape of Good Hope, and once more opened up trade with the East, and planted her colonies in more than one advantageous position. But the passage to India and the further East by the Cape of Good Hope was long and dangerous, and the question of the possibility of a western passage seemed naturally to suggest itself. To Christopher Columbus, familiar with the sea, cherishing associations with the commercial and naval achievements of his native city, and conscious that it was useless to entertain any hope of opening up trade with the East by the cities of the Levant, the prospect of finding a western passage must have been peculiarly attractive. It seems for some time to have engaged his study, and he at length offered to his native city to conduct a voyage of discovery to the west, seeking by that route a passage to the East. Genoa was not in a position to accept the proposal. Rome

treated his offer with coldness. He therefore sent his brother Bartholomew to London to lay the matter before Henry VII, while he himself went to Spain to seek the aid of Ferdinand and Isabella. Both the English and Spanish courts accepted the offer, but the associations of Columbus were much closer with the court of Madrid, and it was only natural that he should prefer England had not as yet taken any to rely on the aid of Spain. active part in the politics of the continent. She had remained For the last hundred and fifty years in her splendid isolation. England had suffered from incessant wars-the Hundred Years War arising out of the claim of Edward III to the French crown, and the wars of the Roses, which had an even more blighting effect on England. These wars were ended only by the battle of Bosworth, and the distruction of the Yorkist cause by the death of Richard III, and the establishment of the New Monarchy, the accession of Henry VII, and his marriage with the Lady Elizabeth the heiress of the House of York. By this settlement peace and safety which are so necessary to trade and commerce, were secured, and England entered on a new period of her history. She took her place in the great commonwealth of European nations, and she began to look out to the wide expanse of the western ocean. It was doubtless the knowledge of these facts which on the one hand induced Columbus to turn to England, and on the other hand induced Henry to promise the aid and protection of the English flag. But in the words of Bartholomew Columbus "God had determined otherwise."

John Cabot must have been by a little the junior of Christopher Columbus. We do not know if they were friends, or indeed ever met, but Genoa was not a very populous city, and the sympathies and tastes of the lads lying in the same direction, and belonging as they apparently did to the same class of society, it is very probable that they may have been thrown together. Under any circumstances the religious, social, and literary atmosphere they breathed must have been the same, and alike must have been their associations with the past naval and commercial glory of their common native city. But the hopeful days of Genoa were past, and Cabot left his native city to seek employment from her succesful rival Venice. This must have been about the time when Venice had made her treaty with the Sultan to which we before

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alluded, and Venetian commerce had still a large measure of vitality. There was a law in Venice by which the rights of citizenship were granted after a residence of fifteen years, and according to the archives of the Ducal palace this privilege was granted to John Cabot on the 28th March 1476; he must therefore have left Genca for Venice not later than 1461. He married in Venice, and his three sons were born there, for though Stow, in his chronicles of England of this period, says that Sebastian Cabot was born after the removal of the family to England he is certainly in error, for when the father John Cabot applied for letters patent it was in the name of his three sons as well as his own. But letters patent would not have been granted to children still in tutelage, so that in 1496, the year in which these letters patent were issued, the youngest Sanctius must have been twenty-one years of age, and there is no reason to believe that the Cabots were in England before 1490; so that it is most probable that all the sons were The Cabots seem to have gone to London, born in Venice. but shortly after to have removed to Bristol, the Liverpool of that day, and which was regarded as the most suitable point of departure for western discovery. In the autumn of 1496 John Cabot addressed the following petition to Henry VII " To the King our Sovereign lord. Please it Your Highness of your most noble and abundant grace to grant to John Cabot, citizen of Venice, Lewis, Sebastian and Sanctius his sonnes your gracious letters patent, under your great seal, in due form to be made according to the tenour hereof ensuing, and they shall during their lives pray to God for the prosperous continuance of your most noble and royal Estate long to endure."

In accordance with the petition on the 13th February, 1497, letters patent were issued to the Cabots, authorizing the equipment and expedition of five ships, to be fitted out at their proper costs and charges, and granting them the entire monopoly of any results of the expedition, and the entire occupancy and holding "of all firm lands, isles, villages, towns and castles, and places whatsoever they be, that they shall chance to find;" reserving a fifth of the profits to be paid to the King.

It is astonishing how much obscurity hangs over the two voyages of the Cabots. We gather very little from English authorities, and the allusions to the expedition in the archives

of Bristol are very meagre. We are compelled to accept testimony from Italian and Spanish sources, and these frequently They seem to have received their incontradict each other. formation from Sebastian Cabot at a subsequent period, and either Sebastian's memory must have been very untrustworthy, or for some reason he afforded a very garbled statement : certainly he confused the events and dates of the two voyages and assigned dates, which if he is properly reported were wholly impossible. He also evidently wished to take to himself all the glory of the two expeditions, and almost ignored his father. seems on the second voyage to have merely casually mentioned his father's name, and there is nowhere any allusion to his return In fact, the father's name drops from that voyage. entirely out of the narrative, and we are left in doubt whether There is no mention of the he ever returned to England. brothers Lewis and Sanctius, and we do not know whether they took advantage of the letters patent issued in 1497. Sebastian Cabot subsequently removed to Spain, and in 1522 he was enjoying the marked favour of Charles V. But at this very time he sent a trusted friend to Venice to inform the Council of that Republic that he was prepared to reveal information on which We have no depended the future welfare of the Republic. means of knowing the nature of the secret, but we know that the relations between Venice and Spain were at that time very critical. This was just a few years after the League of Canbrai, when Venice had lost all her possessions on the mainland. Charles V. had invaded Italy, in order to wrest Milan and Savoy from France, and Venice had taken the side of France. There can be little doubt that the secret which Sebastian Cabot proposed to reveal to the Council at Venice must have been to the prejudice of Charles, in whose service Sebastian then was, and from whom he had received several favours. In 1547 Sebastian was in England with the consent of Charles, from whom he had received some title of distinction, and a pension. In England he became associated with the famous company of Moscovy, whose object In January was to seek a passage to Cathay by the Northeast. 1548 Edward VI. made him Pilot Major of England, and settled on him a pension of f.166.

In 1549 Charles V. recalled him to Spain as the recipient of a

pension from the Spanish crown, and therefore regarded as a Spanish subject. Sebastian, however, refused to leave England, pleading that he was the recipient of an English pension, and he applied to the councillors of Edward, who replied that as Cabot had expressed an unwillingness to leave England, they saw no reason in justice to force him to leave the country, and in the course of the same year Edward granted him a gratuity of f_{200} . In 1551 Sebastian opened negotiations with Venice; this time offering to conduct a Venetian expedition to the East by a strait he claimed to have discovered. These negotiations also failed. Some two years later Charles, who seems still to have had a very high opinion of Sebastian's knowledge of nautical affairs, urged Queen Mary to direct his return to Spain, but Sebastian again The cause of these repeated refusals is open to conjecrefused. It would certainly look as if he were afraid that his overture. ture to Venice had become known to the Spanish court. In 1557 he resigned his English pension, but two days after it was restored, to be shared, however, by one William Worthington, who was engaged with him in certain services. The pension had been originally granted "in consideration of good and acceptable services," and it no doubt ceased when he was no longer able to discharge these services, or rather it was divided with a coadjutor.

Sebastian Cabot must now have been over eighty years of age, and we learn from two different sources that his mind had become much enfeebled. The item of 1557 is the last notice we have of him. We do not know where or when he died. A contemporary writer, Richard Edner, says that he died about the close of 1557, but we do not know how much credibility we are to give to this statement.

It is very unfortunate that no journal of the voyages of the Cabots, nor indeed any manuscript whatever, has been preserved. Besides two contemporaries, who make mere allusions to the voyages, we have a somewhat longer notice by one Pedro Martyr, of Anghiera, and another by an unknown de Ramusius. Both these represent themselves as receiving their information from Sebastian Cabot himself. Pedro Martyr writes: "Directing his course towards the north Sebastian Cabot tells us that he met great masses of ice, which in the month of July were floating

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in the sea. The duration of the day was continuous, and they saw great icebergs. So he was obliged to change his course more to the west. Then he turned more to the south, and coasted along the shore till he reached the latitude of the Fretum Herculeum."* De Ramusius is a little more full, and he quotes from a letter of Sebastian as follows : "At the commencement of the year 1496 I set sail in a north-westerly direction, not expecting to reach any other land than Cathay, and to pass by there to India. But after some days I discovered the land stretched away to the north, which displeased me very much. I, however, continued to coast along in hope of finding a gulf which I might sail through (que Je puisse contourner.) I did not find any, but I remarked that the land extended to the 56th degree of north latitude. Seeing that then the coast inclined to the east, and despairing of finding a passage, I returned to examine the coast in the direction of the equator : still with the intention of finding a passage to India, and I arrived at that part of the coast which is now called Florida." This letter was lost, and we have only de Ramusius' recollection of it.

De Ramusius also informs us that Sebastian told him that his father died at the time when the news of the discovery by Columbus reached England. Besides this information, there is a short notice taken from the records of the city of Bristol. "In the year 1497, the 24th of June, on St. John's Day, was Newfoundland found by Bristol men in a ship called the Mathew." There are several maps in the archives of some of the cities of Europe which claim to present the earliest discoveries in Some of these are believed to be copies of maps America. draughted by Sebastian Cabot himself, and on the margin of two or three of these maps are notes said to be from information afforded by Sebastian. Now it is difficult to determine how far this information is reliable. In the first place the date given by Sebastian for his father's death, as reported by de Ramusius, cannot possibly be correct. The voyage of Columbus was in 1492, and it was immediately reported to the English king. It was not till four years after this that John Cabot applied to Henry VII. for letters patent, and it was not till the year after that he sailed on his voyage. But there is a great difficulty in

*The Straits of Gibraltar.

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determining the land first sighted by the Cabots. The Bristol record informs us that the land discovered by the Cabots was Newfoundland. But on a map dated 1599, given in the Hakluyt collection, it is expressly stated of the Labrador coast: "This land was discovered by John and Sebastian Cabot for King Henry VII.," and in the short narrative of de Ramusius, the land discovered by the Cabots is certainly Labrador.

But, on other and apparently more reliable maps, Cape Breton is marked as Prima tierra vista. How, amid these discordant testimonies, are we to determine where was Cabot's landfall. It is quite evident that the date assigned by de Ramusius, as given by Sebastian himself, was the date of the first voyage, yet the events narrated belong to the second. The latitude of Bristol is 51°30', while the latitude of Quinsay, the most southerly city of Cathay, is 45°, very nearly the same parallel as Cape Breton. Just as Columbus directed his course from Spain due west from the Azores, and reached the West India islands on almost the same latitude as Cipango, which place he hoped to reach; so John Cabot directed his course by the south of Ireland, and then turned north apparently to get on the same parallel of latitude as Quinsay, and admitting a slight deviation of the compass, and We the effect of the gulf stream, he would reach Cape Breton. learn the direction of his course from letters written by Raimondo Sancino, envoy at the court of St. James, from the Duke of Milan, Ludivico Sforza. If Cabot had intended to go north he would scarcely have directed his course by the south coast of Ireland. On his second voyage John Cabot, for he was still the leading spirit of the movement, though Sebastian took the full credit to himself, sailed with a fleet of six vessels, fitted out and equipped at the king's expense; the Mathew, fitted out at Cabot's own expense, being apparently the sole vessel of the first expedition. The purpose of the second voyage was to find a northeast passage, and with this aim in view he went around the north of Ireland, and kept a northerly course, reaching the region of icebergs, and field ice, and of almost continuous daylight. When then he reached land on this second voyage it must have been pretty far north on the Labrador coast. The decision as to the first landfall of Cabot seems to lie between Newfoundland and Cape Breton. Dr. Sam. Dawson, in an able paper read before the Royal Society of Canada, has we think proved beyond doubt that it was The notice in the Bristol Cape Breton and not Newfoundland. archives speaks of Newfoundland as the land first discovered by But this notice seems to have been inserted at a later Cabot. period. On the other hand on maps, said to be copies of earlier maps draughted by Sebastian Cabot himself, Cape Breton is distinctly marked as Prima tierra vista. But there was especially a map in the private gallery at Westminster, attributed to Sebastian Cabot, and engraved by Clements Adams : unfortunately this map has been lost, but Hakluyt saw it, and preserved some of its marginal notes, one of which is given as follows. " In the year 1497 John Cabot a Venetian, and Sebastian his son opened up this country," that is Cape Breton, "which no one had previously attempted to go to, upon the 24th of June early in the morning about five o'clock. Moreover he called this land Terram primam vissam-I believe because he first from seaward had set eyes upon that region, and as there is an island situated opposite he called it the Island of St. John, I think for the reason that it was discovered on St. John's day." Nearly all the subsequent maps represent an island lying directly opposite Cape Breton, and which was called St. John. In a map bearing date 1500 which was sent by the Spanish envoy at the court of St. James to Charles V. Cape Breton is clearly designated as Cavo descubricto and again close to it Mar descubrielo par Ingleses. There can we think be little doubt that the point of the landfall of John Cabot was Cape Breton. There first on this continent was placed the English flag. But England did not retain possession of this land. France and Spain attracted by the rich fisheries settled along the coast, and it was only in 1758 that England, at the cost of many lives and much money, recovered possession of that first discovered land of Canada.

G. D. FERGUSON.

CO-OPERATION.

IN August, 1895, was held in London the first International Co-operative Congress. It was in many respects a most notable meeting, and afforded a great deal of interesting data, both for students of economic principles and for those who are interested in the social and economic problems of life.

A comparison of the co-operative congress with the socialist congress, held a year later, affords food for reflection. The socialist congress was composed largely of theorists, agitators and extremists, narrowly selfish in their purposes, widely straggling and unpruned in their ideas. Undisciplined by practical organization, without the chart of experience, and without the rudder of self-control, they were embarked with but a single resolve: to leave the routes of the present and set out in search of some mythical islands of the blessed, as to the nature of whose blessedness or as to whose latitude and longitude there was a hopeless diversity of opinion.

The International Co-operative Congress, on the contrary, was composed of men of practical experience, of social stability, and of moderate aspirations; advocating no merely sentimental or unbusinesslike philanthropy, but equally condemning selfishness; with faith in the ability of men of honesty, capacity and industry to greatly improve their lot by intelligent and prudent co-operation. They advocate no schemes of total regeneration, they look forward to no utopia where human nature has become inhuman. They take human nature, economic laws, social and political institutions as they find them. Their plans for social improvement are applicable only to the rational, stable, self-reliant classes of all social orders. They propose to better the condition of those who are fit for co-operation by a legitimate development of present practical conditions. While the socialists reproduced chaos in the attempt to organize their unpruned and undisciplined forces, the advocates of co-operation organized without the slightest difficulty in the most orderly and effective manner.

A full report of the proceedings of the Co-operative Congress has been lately published, containing the various papers, addresses, resolutions, daily discussions and special reports from different countries. The volume is a very mine of facts as to cooperation in its various forms and in different countries. It is also enlightening as to the aspirations and ideals of co-operators from all quarters.

As an indication that the movement is not a sectional one, but is interesting to all grades of society, it may be stated that the Congress was held under the presidency of the Right Hon. Earl Grey, and among the vice-presidents we note such names as the Marquis of Ripon, the Marquis of Dufferin and Ava, Earl Stamford, the Lord Bishop of Durham, Hon. T. A. Brassey, Lord Reay, the late Judge Hughes, Canon Holland and many other names well-known in England, as well as those of many distinguished foreigners.

Having referred to this interesting episode in the history of co-operation, we may now look into the nature and prospects of the movement itself. In the light of the world's experience in co-operation, what, we may ask, has come to be recognized as its legitimate sphere; what are its various forms and capacities, its possibilities and limitations?

In the first place we require to distinguish various types of successful co-operation. The most fundamental division is that between the distributive and productive sections. Distributive co-operation confines itself entirely to the work of selecting and buying goods, and placing these in the hands of consumers in the most direct and economic manner. The advantages sought are a better quality of goods and a large saving on what goes to the middle man. This is the department of co-operation which has been brought to the greatest degree of perfection in England, where over \$250,000,000 worth of goods are annually disposed of through co-operative societies. In consequence of this movement, the enterprising retailers in order to maintain their position have been compelled to follow the example of the co-operative stores, to organize the work of distribution on a much larger scale, with a capacity to handle vast quantities of goods at a minimum of expense and thus be able to sell at prices which will compare favourably with those of the co-operators. This is the idea

which is being developed in the magazine or department stores of America. The co-operators do not, however, aim at giving the most of their savings to the customers in the shape of reduced prices, but rather in the shape of profits to be distributed among the members of the co-operative society. The profits distributed of late have amounted to from twenty to twentyfive millions annually. This arrangement is necessary as an inducement to join the society. Customers outside of the organization do not therefore participate in the full benefits. So completely have the great co-operative societies in England and Scotland adhered to this idea, that their salesmen and other employees do not share in the division of profits except in so far as they belong to the society as co-operative purchasers. An effort is being made to get these societies to extend to their employees a share in the profits on the ground of their service, but hitherto without much show of success.

In co-operative production, on the other hand, the central feature is not the purchase of goods for the supply of wants, but the manufacture of goods, or the rendering of services, for the supply of a general market. Not saving on consumption, but profit on production is the great object here. This, we may see at a glance, is a wholly different region, with very different problems to face and special difficulties to meet. In the first place a very distinct organization is required. In distributive co-operation the central management may, with ordinary care and experience, purchase a great variety of goods from a great variety of producers, and find their customers practically assured in the body of co-operators. But in productive co-operation experience, skill, capital, and management are all tied down within the narrow lines of a specific department of production or Special qualities are here called for in the management, service. greater power and responsibility must lie with the executive. The risks of capital are greater, so also the difficulty of finding steady and profitable sale for the goods, involving great care and foresight in determining the quality and quantity of goods to be produced for the general market. This system, as tried in Great Britain, having to encounter so many difficulties in a lively and competitive market, has not proved very successful in the past, but with added experience, care in management, proceeding slowly and as experience justified, it has, in some special lines, met with more promising success of late. In France, however, this side of co-operation has been more successful than elsewhere. As I shall attempt to show presently, there are special conditions in different countries favouring or hindering certain types of cooperation.

On the side of production we observe several different phases of co-operation, each suited to special circumstances, social or First, we have the type known as profit-sharing. economic. This, in its simplest form, means that the employees of an industrial establishment are paid regular market wages, but that in addition to this a certain percentage or share of the net profits is distributed to them as a bonus, usually in proportion to their In this type the business is completely owned and wages. managed by the employer. The employees, while encouraged to take a special interest in the business, and to expect a share of the returns, are not in any other way tied to the establishment. An extension of this principle, which seeks to give the employees a more permanent interest in the business for which they work, provides that the amount to be distributed from profits is not to be paid over in cash, but is to be added to the capital of the business, in the names of the different employees, and as soon as the sum credited to any employee amounts to the value of a share in the stock of the company, a share is issued to him. In virtue of that share, and to the extent of it, he is a partner in the business, and his voting power and inhis fluence in the management increase with This does, of course, give the workman a more personal interest in the business, but if he wishes to sever his connection with it at any time, he has practically to sell his shares also. Even in such cases as the latter, however, the bulk of the capital is supplied by the original owners, who still control the management. Another form of organization is that in which the capitalist supplies the capital and management, and the labourers supply the work ; but instead of the labourers being paid a definite wage and then participating in the net surplus, in this case the capitalist is guaranteed a certain fixed percentage on his capital and a certain salary for management. From the net profit remaining is first paid the wages of the workmen up to a certain

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scale, after which capital and labour share in any surplus remaining, according to arrangement. Special provision may be made for the extension of capital. But the most complete and independent form of all is that in which the workmen themselves organize for co-operative production, they supplying the capital, management and labour, reaping all benefit and bearing all loss. Experience shows that this is the most difficult kind of organization to maintain and most frequently comes to grief. Even in France, where it has been most successful, there have been many failures to record, and it is found to be practicable only among the higher grades of workmen. Three typical French co-operative societies of this kind are engaged, one in lithographic work, another in house painting and decorating, and the other in upholstery. They are centred in Paris and find their customers chiefly among the wealthy classes and the State Departments. Where men and conditions can be found favourable to its existence it is certainly a highly satisfactory kind of co-operation.

We may now note some causes of failure and success, and some reasons why certain forms of co-operation naturally succeed best in certain countries. In the first place, it is observable that more or less permanent social conditions are required for the carrying on of successful co-operation on the side of production. A man may move from one town to another, or shift from one line of work to another, without in the slightest affecting his relations to a co-operative distributing society. Though he may live in quite different localities and produce quite different lines of goods, or render quite different services, yet he always wants much the same range of goods for consumption. At any rate his range of consumption, be it great or small, will nearly all come within the lines kept by a co-operative store. But a change of place or a change of employment breaks off the worker's connection with a co-operative productive establishment. Hence it is that co-operation in its typical forms can flourish only where there is a very stable and permanent social structure. This enables us to recognize in a measure why it is that co-operative production should take such firm root in a country like France, where the framework of society is very stable, where there is little shifting of population from one part of the country to another, or from one occupation to another. On the other hand, we recognize

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that, owing to the freer social and economic movement in Britain, productive co-operation is less likely to be successful there, and that, owing to the still greater fluctuation in America, there should be so little attempt at anything of the kind here. Profit sharing, in its simplest form of a bonus on wages, is about the extent of the movement here. To suppose, however, that on this account Europe is more advanced in these matters than America would be a great mistake. Co-operation in Europe is largely a movement tending to find relief from restraints which are no longer felt in America. The very social and economic conditions which accompany such a stable structure of society as in France, for instance, give few opportunities for workmen and others in the wage class to rise to a higher and more independent sphere of life. Hence many men of quite superior capacity are always to be found in the lower economic classes, capable alike of feeling the bonds which tie them down, and of working their deliverance if given an outlet, or of becoming revolutionists of one kind or another, if denied any normal outlet. To men of this stamp cooperation does bring a means of realization, and conversely it is there that co-operation in its developed form finds men capable of working it. But in Britain, to a certain extent, and much more in America, to which many of the restless British come, the remarkable fluidity of population and business, as compared with Europe, affords many opportunities for trial and experiment in realization, enabling men of exceptional ability and character, and even some without the latter, to rise from humble beginnings to very great eminence. Looking at co-operation, then, as it invites us to look at it, as a means of giving an outlet to men of capacity who are tied down by a system which the individual alone cannot break through, we may say that the development of the American industrial system has already passed beyond the stage at which it could derive much assistance from the co-operative plans now working in Europe. When, then, Europeans deplore our seeming backwardness in this matter, we can only reply, that while we sympathize with their work and rejoice at their success, yet most of their plans are not for us, who have our own cooperative experiments going on on so large a scale that they are overlooked and we are supposed to have none at all. Difficulties we have, large and dangerous in proportion to our freedom, but

they are not to be removed by remedies which belong to a past stage of existence. As a further illustration of the difference between our economic conditions and those of Europe, we may take that other important phase of co-operation known as the people's These banks have of late attracted a great deal of attenbanks. tion, and are writ large in the proceedings of the co-operative People's banks have recently risen to importance in congress. Germany and Italy. They flourish also in Belgium, and to a smaller extent in other European countries. At once the need and the opportunity for them are due to the crude organization of credit, and, consequently, primitive system of exchange and defective command over capital, which prevails through the greater part of even the most advanced countries on the continent of Europe. There an immense amount of economic energy lies dormant, especially among the middle and lower classes. То awaken it into life and make it available for its owners, as well as others, is the central object of the people's banks. Their principle should be familiar enough to Canadians, when once stated. It consists in collecting, by means of the deposit system, the small savings of farmers, tradesmen and artizans, into a joint fund, which is then available as loans to those who can make good use of it. Thus the talent which was formerly kept tied up in a napkin, or stowed away in a stocking, is put in a position to become useful for both its owner and employer. What was not sufficient for each one to employ as his own is large enough for several to employ when collected into one fund. Moreover, by making connection with the regular banking system of the country, and by proving the validity of their credit, these people's banks are able to draw from larger reservoirs, and thus greatly improve the productive powers of the country. Observe that this scheme does not profess to feed the hungry, to give employment to those out of work, or in any direct way give something to people who have nothing. It simply seeks to enable people who have something to make more effective use of it. But in doing that, behold ! it feeds the hungry, employs the idle, and, quite generally, enables many who have nothing to acquire something, provided they care to do so.

But this is a condition of things, which, though new to the continent of Europe, is highly developed in other parts of the

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world. It is a matured form of that system which, during the past century has changed the commercial area of Scotland from one of the poorest to one of the richest countries of the world. On this side of the Atlantic, where it has been long in process of growth and has been pushed to the very limit of safety—sometimes over it indeed—it has achieved even greater things. Without its organized system of credit, seizing and using as a lever every available shred of concrete capital, it is difficult to imagine how even a tithe of the progress of America could have been possible.

If we take a table of statistics, such as we may find in *The Economist*, showing the weekly returns from the world's banking centres, we may observe what a very large item metallic money and bank-notes make in the circulation of the continental countries of Europe, and what a comparatively small item the deposit business is. While if we turn to America, passing England as mid-way between, we shall find what a comparatively small item metallic money and bank-notes form in proportion to the deposits. Behind all this there lies a long story of slow, laborious, and wasteful because expensive methods in Europe, and of rapid, light, economic methods in America.

There are, it is true, and must inevitably be greater risks in America, but the saving and efficiency on the whole, render insignificant all the losses that occur. The loss in America is a loss of a mere fraction of a vast additional gain. Europe may not lose that fraction, it is true, but only because it never enjoyed that vast additional gain. A pauper cannot suffer bankruptcy.

If, then, we are once more reproached with being behind the times, because we have not made an effort to introduce co-operative banks. we can only answer that we are so far beyond that stage that they could be of almost no use to us. We may recognize very fully, however, that they have been, and are likely to be, of the greatest use in Europe, and we heartily wish them God speed.

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Enough has been said, I think, to indicate that co-operation in America must be of quite a distinct type. But, in order to have an intelligent conception of what it may be, it is first of all necessary to know what is involved in our present co-operation. Understanding that, we are in a position to know in what direction it is possible to extend it, or in what parts it is necessary to restrict it.

The central idea in the highest form of co-operation is that every one should contribute the elements of capital, labour and management, and should receive a share for each from the joint product. But experience has shown us that, while joint control may to a limited extent be a good thing, yet joint management in the same field is nearly always a bad thing. In management all good and effective results come from concentration of responsibility and freedom of action within the limits of the function to be controlled. If the management cannot be trusted with that responsibility and freedom, then it is rotten at the heart and might as well be given up at once. The strength obtained by propping together a number of rotten timbers is only to be trusted to when circumstances are desperate. This criticism of joint management does not apply to organized management, which is simply an instance of division of function. In this case each one is responsible for his department to a higher authority until we reach the central management which may be one man, or a small number of men representing different aspects of the work. Experience teaches, then, that it is not expedient that every one who contributes capital or labour or both, should have a share in the management. As to whether he should have a voice in electing the manager, is a question impossible to answer in general terms. There are here two variable quantities to be considered, first the nature of the business; secondly the intelligence and character of the voters. In some lines of business it is quite feasible, in others it is not; in the case of some men it is feasible, in case of others it is not. Each case must be settled on its own merits. There need be no restriction, however, on the contribution of capital and labour. But in cases where both capital and labour are contributed should both go into one and the same enterprise? Co-operative schemes almost always assume that they should. Yet a great deal of the flexibility and efficiency of American business is due to the fact that they do not.

Observe that we have long passed the stage at which it was necessary that each man should enjoy the actual fruit of his own labour. A man may now work all his life producing articles not

one of which he ever uses. And yet he secures in return for his work a wide range of wants supplied, for himself and family, by means of goods and services extending over the whole habitable earth and navigable seas. Narrow indeed would have been their supply had men always insisted on getting everything they produced.

Is it any more necessary that a man's labour and capital should always be joined in the same industry? This is, indeed, a much more modern question.

Let us take a practical instance. A man may regard himself as a labourer only, in no sense a co-operator, but with interests antagonistic to capital. Yet he may have an account at a savings bank. He may belong and pay dues to a labour organization, which also keeps a bank account, and occasionally invests its accumulations. He may belong to some society of which life insurance is a feature, and be making payments on a life policy. Now, if all that man's savings were brought together and invested in the business in which he is employed, he would recognize himself, and be recognized by others as a co-operator, contributing both capital and labour, and drawing both interest or profit, and wages.

But, if his savings are mingled with those of all others in the common investment fund of the country, upon which a great part of the capital which employs him may depend, is he not still, to practically the same extent, a co-operator? Is not the cooperation which permits such an automatic and mutual support of capital, with corresponding flexibility and rapid adjustment of supply and demand, a far more advanced and perfect co-operation than that which ties down one's savings to employment by oneself, or at the most to personal and separate investment?

In modern industrial society everyone who is making deposits in savings banks, paying insurance policies, or contributing to societies whose joint funds are deposited or invested, is contributing to the working capital of the country, and is, to the extent of his holdings, a capitalist. The whole commercial network of the country is one vast co-operative society.

Further than that, here in America, where this kind of cooperation extends to all grades, in virtue of the flexibility and unprejudiced character of our credit system, it is virtually proclaimed

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to everyone,—Prove your ability to use it well, and here are hundreds, thousands, millions at your disposal in one of two lines, either as managing and developing businesses already established, or in working up new businesses on an independent basis. But it is precisely to encourage the collection and deposit of savings in a shape available for trade, and to give a wider and freer outlet for men of industry and capacity that the productive cooperative movement is being fostered in Europe. Many people, however, cannot see the wood for the trees. Our co-operation is so universal, so atmospheric, that we seem to have none at all. Yet it is chiefly this co-operation of ours which makes the standard of living for all industrious classes so much higher in America than in Europe. It is possible for it to rise still higher, I am sure.

There is one form of co-operation, as I have already hinted, by which it is possible to improve the position of hired labour, and that is by profit sharing. This is spreading, slowly it is true, but surely, in America. It is, I believe, a fact of business experience, as well as in thorough accord with the ground principles of human nature, that the workman who is given a share in the profits of the business in addition to his wages, will, by added care, interest and diligence, more than earn the extra profit, and that it is an advantage, not only to the labourer himself, but to his employer, and to the whole community.

In the higher grades of service, also, by adding this feature to our present system America could secure in a still greater degree efficient service from all grades of talent. That talent, itself, is capable of much improvement. Education has still much to do for the commercial and upper classes of this country in enabling them to be even more efficient, not merely as men of business, but as well developed citizens, who will take a broader view of life in general, for the mystery of life is the study of man.

ADAM SHORTT.

LIGHTNING AND LIGHTNING RODS.

I. LIGHTNING.

 $\mathrm{W}^{\mathrm{HEN}}$ Arago nearly half a century ago commenced writing his memoir upon Thunder and Lightning, he was warned by some persons that the subject had been utterly exhausted by Franklin and the physicists who followed up his researches. His own opinion was likewise that all the requisite elements would be found in works upon physics, and that it would be necessary merely to collect facts, "constant in their occurrence, definite in the occurrence, definite their features, and having well-marked distinctive characters," and to co-ordinate them according to the particular arrangement which suited his object. The attempt obliged him to look over many hundred volumes of transactions of academies and societies and a multitude of memoirs, narratives of voyages and travels, etc., generally to find the facts available for science disappointingly few. So far from finding the subject exhausted, he says "I consider that after all the pains which I have myself taken, the most to which I can pretend, is to have supplied for the future history of thunder and lightning a sort of 'canvas,' to be gradually filled up, by the arrangement in their appropriate places of the facts with which meteorology is still to be enriched."

The position of the modern physicist is not essentially differ-The theory of lightning proposed by Franklin is so simple ent. and generally satisfactory that many eminent authorities regard it as perfect, and Lightning Rod Conferences unanimously denounce any modification as heresy. But observation proves the The most varied and majestic of natural phenomena is not to be bound by a law which can be expressed theory too simple. To vindicate its freedom, lightning occain a single sentence. sionally dashes through a stone wall or tosses a church spire to the winds, when by the votes of Conferences it should have gone peaceably to earth by a copper conductor. The theory is correct, but it is not quite complete, and quite recently two different lines of lines of investigation have contributed important additions : the

study of alternating currents of electricity and the discovery of electric waves. The practical application of alternating currents has led to a great advance in the theory of variable currents of all kinds, so that many quantities, which not so long ago were regarded merely as mathematical abstractions, have become very familiar as physical realities whose effects are pretty well known. The discovery of electric waves by Hertz in 1887 marked an epoch in the history of electricity, but it was almost effected simultaneously by Professor Lodge, who was studying the behaviour of lightning.

Satisfactory knowledge of the nature of lightning dates from Many persons had previously noticed the resemblance 1752. between the lightning flash and the electric spark, and had conjectured that the natural phenomenon was of the same nature as its laboratory miniature, but no proof was furnished until Franklin took up the problem. That acute physicist in his experiments with electricity observed that when a sharply pointed piece of metal connected to earth is presented to an electrified body, the body gradually loses its charge; also, it is found impossible to charge a body which has a sharp metal point, as the charge escapes quickly from the point : in the dark this is rendered noticeable by the glow which surrounds the point. Franklin speaks of this* as "the wonderful effect of pointed bodies, both in drawing off and throwing off the electrical fire." This property of points, he saw, furnished him with a means of testing the character of lightning, and ultimately he was led to send up his famous kite. The kite carried a sharply pointed wire, which was attached to the string and projected some inches above the frame. To the lower end of the string was fastened a metal key, and the whole was held by a silk ribbon; the kite was then floated into a thunder-cloud. When the string became wet with the rain electricity was easily collected at the lower end; sparks were obtained, spirits set on fire, a Leyden jar charged, and all the experiments performed which had formerly been made with electricity obtained in the ordinary way. Franklin soon afterwards found that the clouds were charged sometimes with positive electricity, sometimes with negative, and the identification of lightning with the electric spark was complete.

*Letter to Peter Collinson, July 11, 1747.

Many physicists investigated the electricity of the atmosphere by similar methods and obtained large quantities of electricity. It was found that the air is almost always charged to a considerable extent, though the electrification is greatest in the neighbourhood of thunder-clouds. The electricity of the air in fine weather is generally positive, the amount increasing at greater heights, but it frequently changes, sometimes very suddenly, to negative; before or during a storm the changes are sometimes very rapid.

The cause of the electrification of the air is unknown. A great many guesses have been made, and probably most of the causes which have been suggested are operative, but the precise manner and extent of their respective operation are quite unknown. Some form of friction is, no doubt, generally, perhaps always, the cause ; water spray or vapour is known to become electrified by friction with solid bodies, and water spray in the form of mist and fog is driven by the wind past solid bodies, such as rocks and trees. But whatever be the particular forms of friction, they are continually electrifying the air or the water vapour it contains. So long as governments imagine that their weather bureaus can publish accurate forecasts without information on any other points than the state of the weather and direction of the wind at a number of stations, of course no other observations can be made on a large scale. But it is gradually being realized that even correct weather prediction requires the fullest possible information of the state of the atmosphere in every respect, not only at the earth's surface, but at all attainable heights. It is to be hoped that it may soon be seen that this requires the electrical condition of the air to be as carefully recorded and studied as its temperature, motion, or hygrometric state. Many physicists have studied atmospheric electrification, but their observations have necessarily been limited to the places at which they could set up apparatus; while the electrification is so complex and variable that observations are of little use unless conducted on the scale of other atmospheric observations. If the elaborate machinery of the weather bureaus were systematically employed for the purpose, the causes of atmospheric electrification and the details of its connection with storms would quickly become manifest. There is abundant evidence of the effects of electricity upon clouds to justify the anticipation of most important practical results from

such observation. The fleecy cloud of steam issuing from a teakettle instantly assumes the dark, heavy appearance of a thundercloud when electricity is discharged into it. Electricity has a wonderful power of uniting the minute particles of water vapour into drops, and it does not seem improbable that after a long spell of dry weather the unusual quantity of electricity in the air may be the principal cause of thunder-showers.

Millions of minute particles of water unite to form a drop, and if the separate particles are charged the drop carries their combined charge. Electricity is thus continually carried from the air to earth by rain, snow and hail; and quite frequently raindrops and hail-stones are so strongly charged as to emit little sparks as they strike the ground. Observers who have seen this at night have sometimes said that the rain-drops became luminous as they struck the ground, sometimes that the ground seemed covered with waves of fire. Sparks have also been taken from an umbrella upon which snow was falling. But it is when the atmospheric electricity becomes accumulated in clouds that electric phenomena are most manifest. Possibly the clouds being semiconductors of electricity merely carry their charges down from the higher regions of the atmosphere. At any rate we find clouds charged to an enormous potential. As these float past objects on the surface of the earth, all objects projecting upwards become charged by induction with electricity of opposite sign. If any of the projecting objects have sufficiently sharp points, the tension is raised high enough to permit a silent discharge to take place from the points, which tends to neutralize the electricity of the cloud. A very great amount of electricity is thus continually discharged silently by trees and all natural pointed bodies, as well as by artificial lightning conductors. In the dark points acting in this way may be observed to glow, a phenomenon which has been most frequently observed upon the masts of ships at sea, because there it cannot escape notice: sailors call it St. Elmo's The following description of this appearance, as observed fire. in 1696*, is very curious :

"During the night the weather suddenly became exceedingly dark, accompanied with dreadful thunder and lightning. We saw about the ship more than thirty fires of St. Elmo. One in particular,

*From the Memoires de Forbin, quoted by Arago.

at the mainmast head, was more than a foot and a half high. I sent a sailor to fetch it down. When the man was aloft he called out that the flame made a noise like gunpowder fired after it has been wetted. I bade him take off the vane and come down, but he had hardly detached it from its place when the flame left it and placed itself on the end of the mast, from whence it could not be got off."

In Switzerland, in 1880, at dusk, during a thunderstorm, a whole forest was seen to become luminous just before each flash of lightning, and to become dark again at the instant of the discharge. Cæsar tells of a thunderstorm, during which " the iron heads of the javelins of the fifth legion appeared on fire."

But ordinarily the heavily charged clouds are too high to be readily discharged by pointed objects upon the earth. The tension rises until the resistance of the air is overcome and disruptive discharge takes place-lightning proper. The quantity of electricity discharged by a single flash is probably never very great, as a cloud is a poor conductor and a flash can represent the discharge of only a small portion-perhaps about a hundred square yards*-of cloud. But the energy expended is enormous; for a lightning flash may have any length from a quarter of a mile to four or five, or even ten, miles, and the energy of an average flash may therefore be estimated as that of a column of air, a hundred square yards in section and a mile long, strained to bursting tension. This is something like the energy expended by ten thousand horses in a second, and therefore, as a flash of lightning lasts less than the millionth of a second, it does work at approximately the same rate as ten thousand millions of horses. The quantity of electricity involved is comparatively trifling, being something like that which flows through an incandescent lamp in the hundredth of a second, so that the most important feature of lightning is the enormous display of energy.

The historical classification of lightning flashes, due to Arago, The historical classification of lightning flashes, due to Arago, recognizes three kinds: (1) zig-zag, or forked lightning, which appears to consist of a very vivid, narrow, sharply defined line of light; (2) sheet lightning, in which the light spreads over an immense surface, but is not so intense; (3) globular lightning, characterized by a spherical shape, comparatively slow motion and considerable duration.

CONSIDERADIE DUTATION. *This and the following numbers are those assumed by Lodge, Lightning Conductors and Lightning Guards. Chap. I.

The first is the destructive form of lightning ; it resembles the electric spark of the laboratory, following a narrow, generally crooked line, which it illuminates most vividly; it is always accompanied by thunder. The path can be studied much better from a photograph as the extreme brilliancy of the flash and its almost infinitesimal duration prevent the eve from accurately observing the details. The main features are easily seen however: the path is very crooked-though never making sharp angles as artists sometimes represent it-and very frequently Fifty years ago writers discussed the question whether divides. forked lightning ever divides into more than two branches; a beautiful photograph taken by Mr. Binden in 1888, and frequently published, shows three main flashes each with from twenty to fifty distinct branches of sufficient intensity to show on the photograph.

What then determines the path of a flash? The resistance of the air is evidently one factor. If the tension has gradually risen to the breaking point, the path is prepared throughout its whole length before the flash occurs. The strain has been distributed throughout the whole volume of air and the resistance of the air breaks down all at once throughout the length of the flash. In each part of the path the break occurs where the air is weakest, and this depends upon a great many irregularities, such as the presence of dust or water vapour or local currents; consequently the path is very irregular. When the tension has not risen gradually, as when a cloud near the earth is suddenly charged by a flash from a higher cloud, the circumstances are different. There is no time to prepare a path, and local conditions have less effect. The discharge is straighter and directed towards the nearest object on the earth; it is called an impulsive rush.

But obviously the resistance of the air opposes branching and tends to make the whole discharge pass by the one path. The explanation of branching flashes must therefore be sought among the properties of electricity, and it is found in one which is of the greatest importance in the theory of alternating currents, self-induction. A current of electricity influences a magnet in its neighborhood, and is therefore said to be surrounded by a magnetic field. If the current is suddenly started the magnetic field must be suddenly created, which requires work. There is thus greater resistance to a current suddenly starting than to one flowing steadily, just as greater resistance is encountered in starting a loaded waggon suddenly than in keeping it moving. In the case of the current this is called self-induction, in the case of the waggon it is called inertia. To a current starting with the suddenness of a flash of lightning, self-induction opposes a resistance frequently sufficient to divide or even completely shatter it.

In sparks produced in the laboratory the branching is always towards the negative end, the spark terminating in a single point at the positive end. Doubtless the same is true of lightning, so that if a flash is forked at the lower end the cloud above was positively charged and *vice versa*.

Objects upon the earth also affect very greatly the path of lightning, high and pointed objects contributing an easier path through the air for a certain distance. Hence trees or elevated metal objects generally form part of the path of the discharge. The effect of self-induction is still to prevent the whole of the discharge from taking the same path, so that in a forest many trees are sometimes struck simultaneously, and it has been noticed in vineyards that in a single flash every leaf over a large area seemed to have been struck.

The effects of lightning are very varied, and almost all have been imitated upon a small scale in the laboratory. When it strikes a dry, sandy soil tubes are frequently found running down several feet into the ground. These lightning tubes, or fulgurites, are hollow and lined with glass, they may have any diameter up to nearly an inch, and have been traced as far as thirty feet. The colour and nature of the walls depend upon the character of the soil. Similar tubes are made by sending a spark through pounded glass. The sudden expansion of moisture drives back the sand, and the heat produced fuses a thin shell of it.

The same explosive effect, due to the sudden evaporation of water, is frequently noticed when trees are struck by lightning, portions of the trunk being found torn into fibres by the sudden vaporization of the sap. Different kinds of trees and different parts differ greatly in the damage they sustain. The leaves and smaller branches are much better conductors than the larger

branches and trunk, and consequently suffer less damage. Poplars are also better conductors than other trees, so that the smaller branches of poplars are generally unhurt, while the trunk receives a gash in one side. Oaks and elms are often damaged to a greater extent, the whole tree being torn to pieces, and portions of the trunk splintered.

The explosive effect of a spark is well shown by a short piece of stout glass tube containing a drop of water. A spark passed through the water will burst the tube, although the ends are open. As the pressure of the expanding vapour is the same in all directions, and as the expansion is unopposed in the direction of the ends of the tube while opposed in other directions by the tube, it might be supposed that the expanding vapour would simply drive the air out of the open ends. But this ignores the inertia of the air. Air and water can so readily be set in motion by even a small force that it is easy to forget that they possess inertia at all. But everybody knows that water will flatten a bullet fired into it, and that even the rare atmosphere at great heights opposes to bodies moving with the velocity of meteorites sufficient resistance to vaporize them ; while this experiment shows that to a sudden pressure a small mass of air opposes greater resistance than a glass tube. Suppose, then, a flash of lightning passes beside a stone wall: a column of air and water vapour expands, on one side it presses against the wall, on the other against the air, recollecting the enormous energy of the flash and its suddenness, it is not surprising that the resistance of the air sometimes exceeds the stability of the wall and the wall is thrown down. Numberless instances of such mechanical effects of lightning are on record, as the following :

"In January, 1762, lightning struck the steeple of the church of Breag, in Cornwall. The south-western pinnacle of masonry was shattered into a hundred pieces and totally demolished. One stone, weighing three cwt., was thrown over the roof of the church to the southward to a distance of sixty yards. Another stone was found 400 yards from the steeple, towards the north, and a third in a south-west direction."

"A small, brick building for holding a store of coals, with its upper part forming a cistern, was placed with its back against one of the walls of Mr. Chadwick's house at Swinton. Its own walls were

thirty-five inches thick, ten and a half feet high, and their foundations went down nearly a foot below the surface of the ground. On the 6th of Angust, 1809, in the afternoon, a terrible explosion was heard. . . . The external wall of the little building, forming the coal cellar and cistern, was torn from its foundations and lifted bodily. The explosion transported it upright, and without overturning it, to some distance from its original place. One of its extremities had moved nine feet and the other four feet. The wall thus lifted and removed consisted, without counting the mortar, of 7,000 bricks, and might weigh about twenty-five tons."

"In St. George's Church, Leicester, the rod of the vane conducted the flash half-way down the spire, where it blew a ring of stones out, and so dropped the top half of the spire neatly inside the bottom half, making a tremendous smash, carrying away all the floors of the tower, and beating in the foundation-arch."

Upon the bodies of persons struck by lightning are frequently found markings, of which the following is a typical description: a boy who had taken refuge under a tree during a thunder storm, was struck by lightning and on his body was found "a perfect image of the tree, the fibres, leaves and branches being represented with photographic accuracy." The substitution of "a tree" for "the tree " would probably make this statement approxi-These lightning prints are not photographs of mately true. scenery but tracks of lightning itself as it spreads over the poorly conducting skin of the person struck. If a glass plate be interposed in the path of a spark in the laboratory, the spark spreads out over the plate in a figure which may be rendered visible by breathing on the glass or by using instead of plain glass a sensi-The resemblance of these marks to trees is very tive plate. striking, but their identification with trees in the neighborhood The following story of the person struck is purely imaginary. relates to an entirely different phenomenon :

"The number 44 in metal was attached to the fixed rigging between the mast and the cot of one of the sailors. The mast was struck and the sailor killed. On his left breast was found the number 44, well formed and perfectly identical with that on the rigging."

This phenomenon also can be reproduced in the laboratory. When the positive pole of an electrical machine exhibits a glow, pieces of wax or other insulating substance placed upon the negative pole produce non-luminous spots of the same shape upon the

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positive pole. Under similar circumstances the discharge from a metallic "44" as negative pole would strike a region of the same shape upon the positive pole, the sailor.

Much more common than forked lightning is the form known as sheet lightning. Very generally this is simply the illumination of air or clouds by forked lightning which cannot itself be seen on account of intervening clouds or hills. In this case distant thunder is generally heard, but not always, for the flash may be so distant that the thunder is not audible. The following account by Professor Tyndall is a good example of this :

"Looking to the south and south-east from the Bel Alp, the play of silent lightning among the clouds and mountains is sometimes very wonderful. It may be seen palpitating for hours, with a barely appreciable interval between the thrills. Most of those who see it regard it as lightning without thunder—Blitz ohne Donner, Wetterleuchten, I have heard it named by German visitors. The Monte Generoso, overlooking the Lake of Lugano, is about fifty miles from the Bel Alp, as the crow flies. The two points are connected by telegraph; and frequently when Wetterleuchten, as seen from the Bel Alp, was in full play, I have telegraphed to the proprietor of the Monte Generoso Hotel and learned, in every instance, that our silent lightning co-existed in time with a thunder-storm more or less terrific in upper Italy."

But sometimes, especially in summer, sheet lightning appears in such circumstances that it seems impossible to suppose it due to a hidden flash of forked lightning and is quite unaccompanied by thunder. It is then called summer lightning and seems to be really a silent discharge intermediate between ordinary lightning and the aurora.

Globular lightning is altogether different from the other kinds, and hitherto nothing bearing the least resemblance to it has been produced in the laboratory. It is also of comparatively rare occurrence, and, as some of the observations of it which have been recorded bear obvious traces of the work of the imagination, many persons have doubted its existence. But the instances recorded are too numerous and too well authenticated to be explained away as imaginary or regarded as optical delusions, however much influence the eye and the imagination may have had upon some of the stories as recorded. The following ac-

count* contains most of the common features of observations of globular lightning with the orthodox embellishments.

"After a rather loud thunderclap, but not immediately after it, the workman, a tailor by trade, being seated by his table finishing his meal, suddenly saw the chimney-board fall down as if overset by a slight gust of wind, and a globe of fire the size of a child's head come out quietly from the chimney and move slowly about the room at a small height above the tiles of the floor. The tailor said it looked like a good sized kitten rolled up in a ball, and moving without showing its paws. It was bright and shining rather than hot and burning; the man said he felt no sensation of heat. The globe came near his feet, like a young cat that wants to play and rub itself against its master's legs; but by moving his feet aside, and making various precautionary manœuvres-all done by his own account very gently,--he avoided the contact. It appears to have played for several seconds about the feet of the workman, who remained seated, his body bent over it, and examining it attentively. After having tried some excursions in different directions, but without leaving the middle of the room, it rose vertically to the height of the man's head; to avoid its touching his face he raised his body and threw himself back in his chair, still keeping the meteor in view. When it had risen three or four feet above the tiled floor the globe became a little elongated, and rising obliquely directed itself towards a hole pierced in the chimney three and a half feet above the mantle-shelf.

The hole had been made to allow a stovepipe, which the workman used in winter, to pass through; but, according to his own expression, 'the thunder could not see the hole, for it was covered by paper which had been pasted over it.' The globe of fire, however, went straight to the aperture, unpasted the paper without hurting it, and made its way into the chinney; then, said the witness, when it had just had time at the pace it was going, that is to say pretty slowly, to get to the top of the chinney, it made a dreadful explosion, which destroyed the upper part of the chinney and threw the fragments into the yard on the roofs of smaller buildings, which they broke through; happily no one was hurt."

It is to be hoped that the next man who has such an experi-

[•]Given by Arago from a communication to the French Academy of Sciences in 1852. In collecting materials for his Essay on *Thunder and Lightning* Arago scenas to have searched every record which might conceively furnish an account of lightning. He has thus brought together a collection of narratives from which most subsequent writers have been content to draw their illustrations. Many of the other quotations given here are also taken from his work.

ence will have a camera at hand. No photograph of a fireball seems yet to have been taken and a few would be very much appreciated. They could scarcely fail to throw some light on the phenomenon and might possibly suggest experiments which would reveal its nature.

To any one who understands the nature of sound there can be no question as to the cause of thunder. Sound is propagated through the air as a wave or series of waves of compression and Anything will produce sound which agitates the air rarifaction. sufficiently rapidly. Moving the hand to and fro does not produce sound, because the motion is not rapid enough to communicate its energy to the air; but the much smaller motion of a tuning fork or of the wings of certain insects is rapid enough to Lightning expands the column of air start waves in the air. through which it passes, and there can be no doubt that this expansion is sufficiently sudden to cause waves of great amplitude. It is true that this column of air immediately contracts as it cools, which corresponds to the conception of air rushing in to fill the vacuum caused by the lightning. But there can be little doubt that this contraction is very much slower than the expansion, and, consequently, much less effective in producing sound. There is no periodic motion, as in the case of a tuning fork, but simply one impulse, so that what is heard is not a musical note, but a crash. For this reason thunder, like the noise of artillery, cannot be heard at anything like the distance its intensity, as compared with that of musical notes generally studied, would indicate. The rolling is due to the difference of distance of different parts of the flash, the sound from nearer parts reaching the observer sooner than that from more distant ones.

N. R. CARMICHAEL.

PALESTINE BEFORE THE DAYS OF THE EXODUS.

WE KNOW to day, what it was impossible at an earlier date to know, how favourable the general historical conditions were to the success of their invasion for the migrating hosts of Israel. Had the Hebrew tribes sought a lodgment in the plains of Canaan either a century sooner or a century later than they did, they would in all human probability have been shattered in the first case against the full power of Egypt at its height under the warlike Eighteenth Dynasty, while in the latter case they would have incurred the resentment of the rising Empire of Assyria, which under Shalmaneser I. had succeeded to the authority of the great Empire of the Hittites.

At the particular juncture when Israel appeared hovering upon the mountains of Moab and preparing to descend upon the cities of Canaan, the great powers were all away from the scene. Babylonians, Egyptians and Hittites, they had all successively fallen back exhausted, and left the tribes of Canaan to settle the superiority among themselves. In the absence of a foreign master the cities felt at liberty to indulge to the fullest every personal animosity aggravated by the bitterness added to hate by differences in politics, religion and race. Like Asia Minor, Palestine has been the meeting point from the earliest times of the most antagonistic elements of humanity. And when these forces were unchained by the withdrawal of the repressive influence of a foreign conqueror, there was left as the result of their blind animosity neither reason to concert measures nor reserve strength to make head against the shifting army that loomed over the Eastern frontier.

How incapable the Canaanites were of offering a resolute resistance to an invading though untrained body like the Hebrew tribes may be readily understood when we consider (a) their previous political dependence and (b) their lack of racial unity.

(a) Their previous political training was Semitic. The Semite has none of that organizing power that the Aryan has, especially in the Roman and Teutonic branches. The largest aggregate that has meaning for him is the idea of a city—that of country is foreign to his notions. There have been at various periods Semitic Empires but such were not organisms. There was no natural cohesion in them. As soon as the conquerer died, or the dynasty fell, the nation vanished, leaving the city state only to claim the love and loyalty of its fellow citizens.

Now from the earliest historical period, whether of Hebrew or cuneiform Assyrian record, we find on Palestine the imprint of Semitism, which will always leave it powerless to resist an invader, owing to its lack of unifying power. Why it was that the Babylonian Empire so early took possession of Palestine, a country so remote from the centre of its power, and whose retention cost it so much war and bloodshed is readily understood when we reflect that war was not undertaken in those days so much for glory as for wealth, and possession of the highways of trade. We may be sure, therefore, that as soon as the Semites from their home around Charran decided to move south to overthrow the Mongolian civilization of Shinar and Accad, they likewise moved westward to the Mediterranean to secure command of what they prized most, the land stretches of that trade whose water stretches in the far west were in the hands of the Phoenicians.

When history first opens we find the Semite side by side, both in Mesopotamia and on the Mediterranean, with the races he Shargon Sharali, the first of the great Mesohad overthrown. potamian conquerors, captured Babylon and Kish in 3800 B.C., Four and then extended his kingdom to Syria and Cyprus. times, according to the Babylonian records, did he march to the " land of the Amorites." He erected a statue on the seacoast facing Cyprus commemorative of his deeds. If he, himself, did not cross to Cyprus, his son and successor, Naram-Sin, did; for among the finds of General Di Cesnola was a cylinder belonging to one who styled himself a worshipper of the "deified Naram" There was thus established from the earliest historical Sin." period that political supremacy of Mesopotamia that left the cuneiform script and Babylonian language a legacy to Syria. So thoroughly was Syria semitised in culture and population during the long ages it was subjected to Mesopotamian rule, that

even the Hittite and Egyptian conquests left its Semitic character unaffected. This is proved to us in the most unmistakeable manner by the recent recovery by Prof. Petrie at Tel-El-Amarna of the correspondence that passed between the great warriors of the 18th Egyptian Dynasty, Tothmes III. and Khunaten, on the one side, and their military governors in Palestine on the other. Though after driving out the Hyksos, the powerful kings of the Eighteenth Dynasty kept up a war of revenge on Palestine for two hundred years, and even carried their victorious arms to the Euphrates, so little impression had the Egyptians made on Canaan that with the death, or rather murder, of Khunaten, the heretic king, last of the 18th Dynasty, the supremacy of Egypt passed away like a mist. While every other influence was evanescent, that of the Semitism impressed by early Babylonia remained. When in the 19th Dynasty Egypt again sent armies against Palestine, it was no longer to wage a war of revenge against the Canaanites, or to gain the glory of extended dominion, but for the purpose of keeping back the Hittites from the northern frontiers of the Nile valley. Even in the days of the warlike Tothmes III., of the 18th Dynasty, 1503-1449, these Hittites were settled north of the Amanus range of mountains, with the centre of their power in Cappadocia and Northern How long their power continued in the north, between Cilicia. the Aegean and the Caspian, may be inferred from the fact that the Hattu are mentioned in the "Table of Omens" as overcome by Shargon I. the Great, 3800, and they only vanish altogether from the stage of history with their complete defeat at Carchemish, 717 B.C. The Hittite power was quite the peer of Egypt. Its culture was transmitted to Cyprus and made its way into Egypt. Cypriote inscriptions, which are mere modifiations of the Hittite tongue, are to be found in the pyramid of Usertasen II., 2682-2660 B.C.

As in the case of Egyptian culture the influence of the Hittite culture passed away before the richer civilization of Babylon. The grasp laid by Babylon on Palestine was never relaxed. However the supremacy might shift from one Mesopotamian state to another, from Uruk to Nippur or Lagash or Agade, that central power was always respected on the Mediterranean. Semitic, Elamite, Kassite Dynasties alike prized the rare productions of the Syrian Coast and valued at their proper worth those commercial routes that brought wealth to the empire and with that wealth, power and splendour.

In 3500 B.C. Gudea, priest-king of Lagash, fought with Elam, brought cedars from Lebanon, alabaster from Phoenicia, gold dust and diorite statues from Magan, that is, Midian or the peninsula of Sinai, for the embellishment, with rare stones and wood, of the temples of the gods; and in the 14th chapter of Genesis, where the writer evidently bases his statements on cuneiform records, we are told how Kudurlaomer, King of Elam, with Amraphel, King of Shinar, and two other kings, proceeds westward in the days of Abraham to chastise five kings of Eastern Palestine who had revolted. The route pursued by them was that taken by the Babylonians for centuries before Abraham was born, entering Syria at the north, crossing the Jordan at Jericho to the east of the Dead Sea, the same line of travel taken by the Israelites when they moved up from Sinai. On the bricks of Eri-Aku he styles his father Kudur-Mabug, "the father of the Amorites," that is, Canaanites. Kudur-Mabug was an Elamite, and his name means in the language of Elam, "the servant of Mabug." Kudur Laomer is a word of the same form and would similarly mean " servant of the god Lagamar," one of the chief deities of the Elamite pantheon. The prominence here taken by Elamite rulers is in harmony with what we know of early Babylonian history, where the supremacy often passes from a native to a foreign race.

According to the cuneiform records, Eri-Aku, in whom some see the Arioch of Genesis, though backed by the full power of Elam, was overpowered and dethroned by Khammurabbi, whose reign is placed about 2200. He stands next in fame to the great Sargon, of Accad, who first, in 3800 B.C., wrested the supremacy from the Turanian stock. Under Khammurabbi the empire was consolidated as never before. Not only was he a great conqueror, following in the steps of Sargon, and carrying his arms to the Mediterranean, but he was a famous digger of canals and builder of temples. Under him occurred a great "literary revival." The increase of libraries and temples called for the use of those precious minerals and woods and varieties of stones which were not to be found in the Mesopotamian plains, and which must therefore come from the mountains and forests of Syria, which from the

earliest times furnished an inexhaustible store to Assyria and Nebuchadnezzar was not by any means the first of a Babylon. long line of Eastern conquerors who carried off rich booty from the West into the land of Shinar for "the house of his god." Three of the kings of this dynasty begin their names with Ham or Am. Many scholars, therefore, for this reason identify Amraphel, King of Shinar, that is Babylon, with a member of this dynasty. Hammurabi is the name that comes nearest in form to Amraphel. This implies to us that, in the days of the invasion of Palestine by Kudurlagamar, Elam overshadowed Babylon, and it was only after the expedition returned covered with defeat that Hammurabi (Amraphel) felt strong enough to break the power of the foreigner. Ammisatana, third in succession to Hammurabi, has left an inscription wherein he calls himself "king of the land Martu," that is the Amorite land, the Mediterranean coastland. Whether he used this title by inheritance or right of conquest, we can assert that in his time Babylonian politics and culture were supreme in Phœnicia and Palestine, and that the suzerainty of Palestine remained unchallenged until in the 18th Egyptian Dynasty Thothmes I., 1550 B.C., marched through Canaan on his way to attack Mesopotamia.

With the intrusion of the Egyptians and Hittites, the tendency to separateness of life became increased. The situation of the region, its geographical characteristics, its political and social environment, were such as to discourage continuity of historical development and unity of political life. The feeling of race connection is soon weakened by local separation. mountainous character of the country isolates inhabitants and makes intercourse and common action difficult. Palestine at this period was the camping ground for every roving band that came All sorts of races lived together as best they could. along. a time Egypt held nominal control. Later the Hittites ruled large parts of the country. When Israel arrived on the scene the power of the Hittites had been broken. The Hebrews possessed a vast advantage over the Canaanites, with whom they came into contact, in that they had a bond of union that the others lacked. They were able to assimilate the mixed population. The bond They became one people that united them was their religion. because they belonged to one God. These independent city

states complete in their isolation with laws, rulers and gods of their own, unconnected with other cities, except at their pleasure, were ill fitted to bear the strain of an assailant. Such a political system was a constant source of weakness, and explains how Canaan during the previous centuries had been so easily overpowered by external foes, and how it was possible for Israel to conquer the Canaanites. who were so much their superiors in material civilization.

(b) The lack of racial unity was of itself a cause of dissension and weakness. Nowhere, not even in France, was there a greater variety of ethnical types so easily to be distinguished from each other. Prof. G. A. Smith, in his recent *Historical Geography of* the Holy Land, p. 57, etc., speaking of the present condition of Palestine, says: "The frequent differences of race in the Palestine of to-day must strike the most careless traveller." Within that contracted space we find Greeks, Latins, Druses, Arabs, Turks, Jews, and many other varieties of extreme diversity. In this medley of nations some are found only in the mountains, others only in the plains. "How much taller and whiter and nobler are the Druses of Carmel than the fellahin of the plain at their feet." "Palestine, formed as it is and surrounded as it is, is emphatically a land of tribes."

As it is to-day, so it has been for many ages. The Amorites of the mountain were and are clearly distinguishable by even the most casual observer from the Canaanites of the plains. In the Druse of the Hauran, that district that lay east of Jordan and north of Moab, we see a lineal descendant of Og, King of Bashan, or one of his great train.

It is only within a comparatively short period that any special attention has been given to the ethnology of Palestine among the other subjects of interest to the student. Since Professor Petrie, however, drew attention to the high value of a study of the ethnological types represented on the monuments of Egypt for the student of Egyptian history, it has been found that the hundreds of photographs taken by him were capable of adding much to the more accurate study of the races of Palestine as well.

Thus many expressions that had little or no meaning or only a rhetorical value to the Bible student of former days, have now a plain and natural meaning, and express mere matter of fact knowledge. Those sons of Anakim which the spies of Israel found so formidable were not the monsters depicted by the imagination of some faithful teacher bent on making a due impression on the youthful mind, but members of that blond stock of the Amorites, before whose brothers in blood, the Kelto-Germans, Cæsar's legions trembled and made their wills. Amorites of the mountains, Canaanites of the plains, mean to us not only different varieties of humanity but also different stages of civilization —all the characteristics that separate the herder of cattle from the tiller of the field.

Of the many tribal varieties that are mentioned in the Old Testament writings, some denote larger and others smaller groups, some denote the genus, others the species.

Of the different race elements, the earliest and one of the most powerful was that of the Amorites. This is the first stratum of population apparently to settle in Palestine, the primitive stock of the land. We know their physical appearance from the paintings of Egypt. They were blondes, with blue eyes and light hair and massive limbs, allied to the blonde Berbers of the mountains of North Africa, and similar in their general appearance to the Kelto-German race. Wherever this race appears, there are also to be found cromlechs and dolmens, memorials of the stone age. It was a mountain race of inferior culture, dating its origin from the age of stone. It probably originally stretched from India to the Caucasus, and southwards from the Caucasus through Palestine and along the whole north of Africa through Spain and France to Britain. The fact that no traces of it are to be found in Egypt may be due to two causes. First, as a mountain race the climate of the Delta was unsuitable, and in the next place, as a people of low culture, it gave way before the superior civilization of Egypt. Its home is in the highlands of Palestine, not in the tilled lands which were occupied by the more cultured Canaanites. The first brunt of Hebrew invasion fell on the Amorites of the highlands. It was only by slow conquest that the lower ground, oocupied by the more highly cultured Canaanites, was wrested from their occupants. In fact, all through their national history the Hebrews as a pastoral people outnumbered the native population only in the higher grounds, while the agricultural districts were always predominantly Canaan-

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itish. The frequent lapses into idolatry on the part of Israel were largely due to the fact that so large a part of the nation consisted of unassimilated heathen tribes. The Canaanite persisted in the land, firstly, because of his superior civilization, and, secondly, because Israel had no desire for an agricultural life. We have in the geographical details of Chedorlaomer's campaign of Genesis, chap. xiv, a picture of Palestine East of the Jordan before the appearance of Israel on the scene. In the days of Abraham the earlier populations are in the land. Palestine, east of the Jordan, was then occupied by the Rephaim, Zuzim, Zam-Zummim, Horites, and other allied tribes, apparently of Mongolian stock. Subsequently, the Amorites pressed down from the north under Og, King of Bashan, and Sihon, King of the Amorites. It was because of their threatening attitude that the Moabites, Edomites and Ammorites, recently settled in their domains, welcomed the arrival of their kin, the Israelitish tribes, coming up from the south. As they, like themselves, were of Semitic blood, an alliance was easily effected, which at the same time secured the Eastern Semites in their seats, drove back and broke up the Amorite kingdoms of the north, established Gilead as a buffer state between the Amorites and Semites, and put the Israelites in possession of the fords of the Jordan, to gain which were it not for the good understanding between themselves and their kin, they would otherwise have required to fight.

Another Ethnical stock largely confined to Eastern Palestine was of Mongolian origin. It played but a subordinate part in the history of Palestine, and was overlaid by other more energetic As the Amorites were the primitive stock of western races. Palestine so were the Mongolian tribes of Horites, Zuzim Zamzummim, Rephaim, Emim, etc., the primitive stock of eastern Palestine. In the days of Abraham they were still in occupation of their seats. Between Abraham's time and the Hebrew invasion the Amorites pressed in on the north, and the Moabites with other Semitic tribes came in from the South. This Mongolian element was kin to the Accadian and Sumerian tribes, also of Mongolian origin, who founded the civilization of Mesopotamia which was seized by the Semites about 4000 B.C. To this powerful stock, which seems in prehistoric times to have occupied the whole of southern Asia, belonged also the Hittite

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and Elamite races, and some ethnologists see in the hated Hyksos that occupied Egypt for so many centuries the furthest wave of that great Mongolian flood which propelled from the north so many invading hosts, Elamites, Hittites and Naharinites.

To these Non-Semitic Amorites and Mongolians, doubtless shepherds, and therefore occupying the more broken ground, succeeded about 4,000 B.C. a Semitic wave of immigrants who in contact with Sumerian civilization had adopted agriculture and the higher civilization and ambitions it entails. This Semitic power had its centre at Charran, Abraham's halting place on One division of the Semites his way from Ur to Palestine. down south and east to overthrow Sumer and poured The other division moved west along the immemorial Accad. route through the defiles of Lebanon to reach the sea. Semitic conquest established the long rule and religious and literary influence of Babylonia, which continued with the capital of the empire shifting now to Susa, now to Babylon and now to Nine-There are two directions by which Semitic races might veh. As a fact of history the Semites of Babylonia enter Palestine. have always come in by the north, all other Semites by the south as was the case with the Israelites and their kin, Edomites, Moabites and Ammonites. Tradition tells us that the Phoenicians were a maritime tribe transferred because of their seafaring habits from the Persian Gulf to the coast of Palestine. great probability, however, is that the naval aptitudes of the Phoenicians were due to their environment. No specially gifted tribe was settled along that barren shore. Whoever occupied that shore must in the nature of things starve or scour the sea Hence from the earliest time of occupancy the for a living. Phoenician was a fisherman and a trader. Cyprus to be seen on a clear day wooed him to spread his sails to the breeze. Rhodes within view of Cyprus was his next stage onward. From Rhodes the coast of Asia Minor lay spread before him, and the Cyclades were stepping stones to Continental and Peloponnesian Greece. Thousands of years before history takes note of Greece it had been exploited by the Phoenicians, it and the whole western Mediterranean. The Phoenicians thus became the intermediaries between the east and the west, until such time as the nations of

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the west sleeping longer because of the mightier task that awaited them, rose to self consciousness.

When the Semites of Mesopotamia poured into northern Palestine, those who settled on the coast became known to history in after days as Phoenicians, Sidonians or Tyrians. Such as decided for a maritime life occupied the coast from Carmel north because of the greater or less shelter afforded to ships. South of Carmel down to the gates of Egppt was a barren, harborless shore that for ages was unoccupied by any people until, in the 19th Dynasty, the Egyptians established the military colony of the Philistines to make good their pretensions to the possession of Canaan. From their clear-cut handsome features as represented in the Egyptian monuments, the claim seems good that they were Greek mercenaries of Cretan origin hired to be a thorn in the side of rebellious Canaanites and Hebrews.

With the exception of the strip of Philistia, all between the sea and the mountains passed into the hands of the Canaanites. The movement of the Semitic Canaanites was from the sea inwards. As agriculturists and possessed of better arms and a richer civilization, they gradually pressed back the ruder Amorites from the plains to the higher ground in the interior. Here it is that we always find the Amorites, as, on the other hand, the Canaanite is found in the plain. Under all circumstances the Canaanite will be found there as child of the soil. for he alone is fitted to utilise its capabilities. It is the earlier and broken races that are found in the mountainous regions of the earth. As islands are the survivals of vanished continents, so are mountain races survivals of a stock that has been swept away by the more highly organized population of the plain. Thus generally in the hill countries the occupants, if not naturally of inferior qualities, are at leastof ruder culture, members of the rearguard of civilization.

The Hebrews, when they crossed the Jordan, assailed Palestine in the rear, and thus had as opponents, not the better equipped and highly trained forces of the Canaanites, but the ruder civilization and hurried levies of the Amorites. Had the battle been in the plain against the cavalry and iron chariots of the Canaanites, there might have been a different issue. As a historical fact we know that for long ages the Hebrews had to satisfy themselves with the possession of the higher districts, for which their stage in civilization best fitted them, and it was only gradually that they extended their rule over the richer districts of the lowlands of Canaan.

The last ethnological element that on a large scale came in to modify the character of Palestinian population was the Hittite race. The representations given by themselves and by the Egyptians in sculptured rocks and paintings are strikingly similar. They are evidently Mongolian in race. They are depicted as squat in figure and stout-limbed. Their skin is yellow, hair black and straight, faces beardless, cheek bones high, nose stubby, and forehead and chin retreating. Their hair was always dressed in three plaits, a fashion that helps at once to identify them on the monuments. Travellers tell us that this fashion is still retained in some remote districts of Northern Syria. The mits on their hands, and boots with huge soles and turned-up toes like a snowshoe, imply a northern origin, which is actually the case.

Everything points to Cappadocia and the Taurus Mountains as their home, an inland and elevated region midway be-The centre of their tween the Black Sea and Mesopotamia. power in the north was Boghaz Keui in Cappadocia, a meeting place of the great trading roads that thence rayed in all direc-Hence is was easy for the Hittites to reach the coast of tions. Along these great routes the Aegean or the Cilician shores. marched the Hittite armies, and their civilization influenced in prehistoric times the course of culture among the Grecian tribes The Hittite and gave origin to the Cypriote art and culture. tribes seem to have been outlying branches of that great Mongolian stock whose brightest civilization was centered at Sumer and Accad. Separated from their brethren of Babylonian Sumer and Accad, now overpowered by Semitic invaders from Upper Mesopotamia, these Hittites concentrated themselves into a northern empire whose culture was derived from pre-Semitic Babylonia. Hence the surprise and doubt of those critics who find a difficulty in the presence of Hittites in southern Palestine in the The Hittite dates days of Abraham is altogether ill-placed. back to pre-historic times, and his contact with the Semites dates from the first appearance of the Semites. The necessities of trade or the possession of special qualities gave him a passport to

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the most hostile races. Hence the presence in Palestine of Hittite settlers long before the advance of a Hittite conquering army ought to excite no special wonder. It was about 1450 B.C. that the Hittite Empire was driving down from the north, and threatening Palestine. Their hosts poured into the Amorite districts in Northern Palestine and drove out the Amorites, who in their turn moved into the region of the Hauran and Mount Gilead, where a century afterwards their dynasty was overthrown by an alliance of the Moabites and the host of Israel moving up from the desert—this alliance being the price of the peaceful possession of the fords of the Jordan.

The genius of the Hittites was of a military character. Though they occupied Northern Palestine for a century, they did not affect its civilization. They were unable to hold the Phœnician coast, or make any permanent impression on the Canaanitish cities. They fortified Kadesh as an intrenched camp, and made it the western focus of their power, as Carcemish was their eastern focus. As a mountain race they were most effective in mountain warfare, hence most successful against the Amor-And as their civilization, while by no means despicable, ites. was on a par with that of the Amorites, but much inferior to that of Canaanite cities inspired by Babylonian culture, the Hittites readily fused with the Amorites. Hence we find them associated in the same regions frequently with the Amorites. And thus the prophet Ezekiel, when referring (ch. xvi, v. 3,) to the origin of the inhabitants of Jerusalem, makes no mere rhetorical statement but an assertion true to history when he says, "thy father was an Amorite and thy mother a Hittite."

The presence of the Hittites added one more element of confusion to the elements already present in Palestine. Their most valuable function was that of preparing the way for the tribes of Israel. When the iniquity of the Amorites was quite full, and the Hebrews appeared on the scene to take possession of the land promised to their fathers, the work of conquest was more than half done already. The masterful and giant Amorites, driven from their chief seat of power on the heights of Lebanon, and sent flying in retreat through the mountain regions of the Hauran, Bashan, and the range of Gilead, are met as they move southward by a Semitic host of Ammonites, Edomites and Moabites, headed by the tribes of Israel fresh from the desert and burning for conquest. Between the upper and the nether millstone the Amorites were crushed and vanished out of history. No wonder, when the Hebrews crossed the Jordan, that the treetops whispered of them, and that the terror of them went through all the land. The Israelites came as if they had been sent for. Such were the conditions antecedent and favorable to the invasion of the Israelites.

It has not been customary to regard the exodus in connection with other events of the same period, but with our larger view of the past, it is easy to see that the exodus was but the greatest among many great movements of the age expressive of the deep craving of the heart for a higher and less material life. contribution to the religious history of the time was the richer, because she saw the end to which she marched and was conscious of her mission and guidance. But God is in all history and in all upward strivings even if they are not clearly spiritual. thirteenth century of the exodus there was a rushing and rising tide of life everywhere over the face of the then existing world. Lifting the curtain of the past, we see in the west the tribes of Italy marching and counter-marching, Italy welding into unity her stubborn forces that she may rule the world, and Greece living her Heroic Age and just about emerging from her isolation to tell the world the dazzling splendours of her Mycenean Age. It is the century when Egypt reaches her climax under Rameses II., and having completed her mission in the birth of Israel begins It is the century when the Hittites having from their western capital Kadesh checked Egypt and broken the Amorite power are crushed in their eastern capital by the rising power of Assyria under Shalmeneser I., a power which under a second Shalmeneser will have the mission of breaking down the regal authority of Israel. This is the century when the Vedic hymns are gathered into one collection, when historians of Indian literature tell us there was a great literary revival, when there breathed new religious impulses in the religious life and there were new movements in the political relations of India. This was, in fine, the century when the worship of the heaven assumed in China a new fervour, and an energetic national movement carried the Chinese into Corea, which thus became the bridge

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by which the age-old civilization of China passed over to Japan and other islands of the Pacific. Such is the background against which stand out in bold relief the tribes of Israel, and such are the nations that sway in dim outline all unconsciously to the impulses of a mysterious power for which Israel alone has a name.

A. B. NICHOLSON.

JESU LOVER OF MY SOUL.

IN A METRE OF PRUDENTIUS. Me care Jesu diligis, Da vivere in sinu tuo, Dum ventus ingruit mari Rotans volumina æquorum. Tutare, dum desæviat Hujus procella seculi, Dum me receptum denique Cælestis ancora alliget.

Est nulla præter te salus, De teque pendeo miser, Ne me relinque, sed mane Tutamen ac solatium. Nil auxili, spes nulla erit Salutis experti tuæ; Caput hoc inerme tu fove Gallina ut alis pullulos.

Est larga apud te gratia Peccata cuncta quæ tegat ; Emanet unda, quæ lavet Purumque me servet mali. Vitæ perennis Christe fons, Hinc da sitim restinguere, Rigaque pectus hac meum In seculorum secula.

T. R. GLOVER.

CURRENT EVENTS.

HE echoes of the Jubilce are no longer in our ears, but they remain in the hearts of millions. The general reason is at The Diamond work-it may be unconsciously-shaping those dim echoes and half-awakened thoughts into convictions, resolutions, aims and ideals, the fruit of which we shall Jubilee. see, soon or late; probably soon, for modern conditions favour greater rapidity of development than was possible in any previous stage of history. Last June the Empire became visible to the eyes of all men, and its unity, which had so long been ridiculed by "brass mouths and iron lungs," stood out in dramatic splendour as a real living thing, capable of being converted into an effective force. That the Jubilee meant this above everything else was admitted by all competent observers, no matter what their race or language. A lingering remnant of the mechanical school mutters, "the Jubilee fever will soon die away." No one heeds, for everyone recognizes that never was there anything less like "fever" than the great celebration. Universality and depth, calmness and spontaneity, were its characteristics everywhere. We are deeply grateful to Mr. Kipling for expressing in his Recessional the profound religious feelings with which the great heart of our world-wide Empire was filled, in presence of a spectacle which many feared would have awakened emotions of a more arrogant kind.

The European concert, though hampered by its jealousies, The Concert has done something. Turkish soldiers have been prevented from landing in Crete. Greece was saved from ruin by their intervention, though her king and poliand Greece. ticians flouted their warnings, in the heady expectation that a bold game of bluff would not be "called." But though Greece receives conquered Thessaly back again, with the exception of a few strategic points, her people are feeling sore from the crown of the head to the sole of the feet. No wonder. They have suffered grievously in blood, treasure and repute; while a dark cloud rests upon their future, which looked reasonably bright before they allowed secret societies to force the hands of their weak rulers. Now, they must eat their leek and learn the lessons of adversity. They may thus prove, what their friends still believe, (and they have still many friends.) that there is good stuff in them, in spite of their defeats and defects. If so, when the time comes for the definite settlement of the Eastern question,

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they will fare better than is now expected, and probably better than Bulgaria, which has disgracefully thrown in its lot with the Sultan. If they submit to the necessity imposed on them of paying their debts, old as well as new, cultivate honest administration, make their civic service efficient and economical, and be satisfied with a small but well disciplined army, they will recover lost ground and secure a respect which the world never gives to bluster or bluff.

The marked feature of the European situation is the isolation of Germany and the commanding position to which Russia has attained, through her own diplomacy and

the necessities and mistakes of her neighbours. The United States, Russia and Great Britain can afford to be isolated No one dreams of attacking either of the first indefinitely. two; and though a great continental coalition against the the third is hinted at, we cannot take it seriously. It is not likely to materialize, and even if it did the parties to it being under no common bond would be sure to quarrel after either victory or These three then are the great permanent powers. defeat. There is scarcely another nation which can afford to be isolated, Germany perhaps least of all, in spite of her magnificent army. The change in the position of Germany is indeed significant. Not many years ago the Kaiser parted with the trusty old pilot, Bismarck, in an airy and top-lofty manner. He, the Lord's annointed, could be both captain and pilot. He could steer the unwieldy ship of State through all the shoals and intricacies of diplomacy, without any man's advice. He intended to be both Chief Justice and War Lord of Europe, and at the same time to secure great colonies and a navy equal to England's. He made no secret of his intentions. What, then, Germans may well ask, is the net result of his incessant talking and intermeddling ? His two allies are practically of no account, should Germany be in danger ;---for Austria-Hungary has made an agreement with Russia as to their respective shares of the sick man's property, when death takes place, and Italy has been crushed financially under the load which the alliance imposed upon her. On the other hand, Russia and France are allied, and with the enthusiastic assent of the people of both countries; and the alliance has no meaning unless there is an implied reference in it to a possible war with Germany ; a war which would excite a madness of enthusiasm among both Frenchmen and Russians. Great Britain, which had always looked on Prussia and her allied States with the friendliest feelings, and which has so often assisted them with men and money, is now more eager for a quarrel with the Kaiser than with her bitterest traditional foe. Such is the result of the impetuous young man's well-meant efforts and speeches.

Were Prince Bismarck of a generous mind he would keep quiet at It is surely unneccessary for him to come out from his present. seclusion, for the purpose of pointing to the contrast between to-day and yesterday, and of calling out in his "brutal" manner and loudest tones "I told you so." It is too bad. The grim, old exchancellor, however, has never prided himself on his courtesy, and the German people has such a high regard for plain speech that it will excuse some absence of refinement, in order to have an authoritive statement of the essential facts of the case. Kaiser is a puzzle to all men, except to Mr. Stead. He still has warm friends and he is evidently a man of considerable though ill-poised powers; but surely, when he looks at the mess he has made of foreign relations, at the discontent of his subjects and at his own personal unpopularity, so markedly in contrast with the veneration felt for his father and his grand-father, he himself might well come to the conclusion that he has been mistaken, and might resolve "to do otherwise" in the future. His best friends, if they have the liberty to give advice, might hint that it would become him to think less of his own omnipotence and to talk less about every subject under the sun.

Meanwhile, thoughtful Englishmen must not be led astray. They should never forget that so many ancient and sacred ties unite them to Germany that war is not to be thought of between the two peoples; that indeed it would be a crime against civilization, almost as great as a war with the United States ; that the Kaiser and his reptile press are responsible for the ill-feeling that has been created, and that, after all, he is a young man who may take a thought and mend; and that at any rate before very long, he will have to change his course or find himself so utterly isolated at home that tall talk from him would be an absurdity. He will probably have business more pressing to attend to than the formation of chimerical combinations against the British He has undone much of what was done to create empire. united Germany between 1866 and 1871. Not only has he made Prussia more unpopular in South Germany than ever it was before, which is saying a great deal, but he has succeeded in exasperating loyal Prussia itself. His people have borne a good deal from him, but they are not in the mood to bear much more. Better far to allow them to settle matters with him, than for us to interfere and force such a people to choose tyranny at home in preference to humiliation abroad.

of Great Britain to

be complete.

When Bismarck formed the Dreibund, and at the same time The Permanent Attitude made a secret treaty with Russia, he effectually isolated France. One thing, however, was lacking. If Britain could only be coaxed or co-European Coalitions. erced into joining the Dreibund, it would then But British statesmen have learned that they represent not merely a European, but a world-Empire. Why should they antagonize either France or Russia? They refused, and here we have the origin of the persistent opposition to British policy which has ever since come from Berlin. Proposals from the opposite quarter are now being made. France and Russia are allied, and why—it is asked in whispers—should not Britain join the alliance and so make it irresistible, and at the same time secure revenge on Germany and immunity from threatened attack? The temptation is great, but let us hope that it will be rejected. Why should we antagonize Italy, Austria or Germany? We are friends of all and have work enough of our own to do in every quarter of the globe.

The uprising of turbulent and savagely fanatical tribes, in the grisly mountain passes which separate Afghanistan from India, The frontier war in against infidels, authority, peace and the mono-

North-Western India. against infidels, authority, peace and the monotony of law, has been unduly magnified. It is merely an incident in the steady march of civiliza-

tion against the forces of barbarism and anarchy. Whether Lord Lawrence's advice to let the mountaineers alone and keep them in good humour with presents, reserving our force in the plains to crush them, should they emerge from their fastnesses for plunder, or Lord Roberts' advice, to occupy all the passes with advanced posts and small garrisons, is the sounder policy, only the daily newspapers can say. Each tub stands on its own General principles are to be applied to concrete cases bottom. with reserve. When high authorities differ, there must be a good deal to be said on either side. At present events seems to justify the opinion of the wise administrator rather than of the brave general. A soldier is always for advancing. The cost never troubles him. He has not to provide the money; and he asks, to what better purpose can revenue be applied than to form a perfect fighting machine? The Duke of Cambridge was always laughed at when he said, as he used to say to all criticisms on the Horse Guards, "Give me more money, and I will guarantee you a better army," but his successor—Lord Wolseley—is now saying the very same thing to the British public. Mr. Bull, too, has found out that there is no other way of getting an irresistible fleet except the old-fashioned way of putting his hands deep into his capacious pockets. There is no other way of getting an army. The only question to be considered is,-what policy will most probably secure peace with honour and with the least possible expenditure on the army? and on this point Lord Lawrence's arguments were very strong. brave mountaineers, he said in effect, will endure anything but a Those master. A fort which they can see from their huts or eyries is a perpetual challenge. If weak, they laugh at it; if strong, it is

a menace to them and expensive to us. India is a poor country, and to wring one unnecessary rupee from its peasants is to endanger the basis of our rule far more surely than to have a somewhat turbulent frontier. Leave the tortoise in his shell, to use Oom Paul's simile; then, if he shove his head out far enough, you can easily give him the happy despatch. Every mile you advance from your base means enormous expenditure for transport and commissariat. Besides, if you leave the tribesmen alone, they will fight and loot among themselves and be anxious for your friendship; whereas, if you subjugate them, they will combine against you and be as ready to explode as a powder magazine. A rumour that you are engaged elsewhere, or have suffered defeat thousands of miles away, the intrigues of an Ameer of Afghanistan or of an enterprising Russian colonel, the preaching of a mad dervish, who counts life nothing when a verse of the Koran commanding the extermination of infidels takes possession of his brain and will, or the intolerable dullness of life among savage rocks, without the old delights of war and plunder, will be spark sufficient at the right moment to set the mountains and valleys in a blaze. Of course, Lord Roberts advanced strong arguments on the other side, and they prevailed with Lord Salisbury's government. Now, there is nothing for it but to reconquer the posts and punish the assailants. The punishment will cost us heavily and be to them of as little account as Aunt Ophelia's whippings were to Topsy. We will not exterminate them, nor hurt their women and children. All that we can do is to burn their villages, and these can be rebuilt in a week. The whole of them put together would not cost as much as a battery or a gunboat. We may be able to disarm some tribesmen, but every man is as certain to get a good gun again as he is to get his breakfast. He may consent to fast, to starve, or even to work; but, consent to live without the best rifle that can be had, he will not.

Things are going well in British Africa, north, south, east and west. In his advance up the Nile, the Sirdar makes no mistake. Of course he is in constant communication with Lord Wolseley, who holds that nothing is so expensive as failure. Lord Roberts may be more popular with the army and the people, but I believe that Lord Wolseley is the right man in the right place. With Berber now in our hands, a rapid advance can be made either to take over Kassala or on Khartoum at any moment. Whether made this year or next will be determined by those who know the facts of the case. Meanwhile the railroad which is being pushed on from the East Coast to Uganda, will ensure effective control of the sources of the Nile. The waterway from Khartoum to the Victoria Nyanza will be cleared and Egypt will

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then for the first time in history have full command of "the river which is her life," from its mouth to the great fountain head, which, when discovered, received the name of the Queen. In South Africa, all is quiet, thanks in measure to Sir Alfred Milner, though he does his work without advertising himself. What South Africa needs, above everything else, is rest; and one would have more confidence in her getting that, if only Mr. Rhodes would recognize that his usefulness there is gone. He is a man of immense power and cannot be disregarded; but he will never be trusted either by the best Dutch and British elements at the Cape or by the Boers of the Orange Free State and the Trans-No better proof of his power to hypnotise the ablest men vaal. need be given than the extraordinary fact that Mr. Chamberlain, in summing up the debate in the House of Commons, on the findings of its Select Committee concerning the Raid, went out of his way to whitewash the man. He had deceived the High Commissioner and thus the Imperial Government; he had humbugged and deceived the Colonial Office and Mr. Chamberlain himself; he had deceived the Board of the Chartered Company whose agent he was; he had deceived his collegues in the Cape Ministry; he had led Imperial officers like Sir Graham Bower into his conspiracy, so cunningly that they could not escape with honour; he allowed Dr. Jamieson and his companions to be thrown into Holloway gaol, while he-the prime mover of the raid-kept out of the way, on the preposterous pretence that he had gone to crush the rebellion of the Mashonas and Matabele. In the face of this terrible indictment which was proved by the Select Committee, Mr. Chamberlain, after successfully clearing himself, went on to say: "But as to one thing I am perfectly convinced, that, while the fault of Mr. Rhodes is about as great a fault as a politician or a statesman can commit, there has been nothing proved, and in my opinion, there exists nothing which affects Mr. Rhodes' personal position as a man of honour." What evil spirit entered the mind of the Colonial Secretary, inspiring an utterance which apparently indicates that there is a moral lack in his own make-up? Many looked forward to his some day becoming Prime Minister of Great But how can anyone be trusted to lead the Queen's Britain. Government, whose views regarding what a man of honour may do are so uncertain or rather so definite. Mr. Rhodes has not only pulled down hosts of smaller men in his fall, but has thus been the occasion of pulling down a greater man than himself; and Mr. Chamberlain has supplied foundation for the charge which his bitter enemies have often made,--that he requires to be watched.

Fortune has smiled on Mr. McKinley's adminis-The United States tration by giving good harvests in the United States, coincident with short crops almost everywhere else. and Cuba. " Dollar wheat " has put heart into the great producing class and led to improvement in transportation and other important lines of business. But, so far, the President has done nothing that his supporters promised, unless it can be said he promised the Dingley tariff, and the policy of inaction cannot be continued much longer. Cuba is likely to perplex his administration before long. Last year every Republican newspaper cried out against Mr. Cleveland for not interfering to stop the barbarous war which Gen. Weyler was carrying on, almost within sight of the Florida coast. Put McKinley in power, they cried, and all that will take end at once. But he has been in power now for the greater part of a year, and has done nothing except to send Gen. Woodford to say formally at St. Sebastian or Madrid what Mr. Cleveland said publicly in his message of Dec. 7, 1896, viz., that if the rebellion was not crushed soon, interference would be necessary. If Cuba had been near the coast of Cornwall, there would have been interference on the part of Great Britain before this. It is equally certain that, if Britain had owned Cuba, the United States would have taken "positive steps" long ago. What is keeping the President back? Is it consideration for Spanish pride, or is he beginning to realize that a war, even with Spain, would cost the United States dear; that it would disturb business, delay the arrival of the goddess "Prosperity," whose advent has been so long and so confidently promised, and also entail obligations with regard to Cuba more costly than war. Yet, he must do something for very shame's sake. There is enough moral force left in the Republican party to insist upon intervention, no matter what the consequences.

There are graver troubles before our good neighbours; social troubles arising from the greed and aggressiveness of capital and Social dangers, the false teaching that has long prevailed concerning the "right" of every man to have good wages, irrespecin the tive of his deserts, or of anything else. Wherever wealth alone distinguishes class from class, money United States. represents all power and all honour. As long as the road to wealth is equally open to all, and everyone is well to do, this arouses no jealousy. But when society gets into such a stage that one far-seeing man or an iron-clad monopoly can rake in fabulous sums, while millions are doomed to long hours of work and starvation wages, the situation becomes entirely changed. The wealthy are then looked on with suspicion. Every tendency on their part to escape bearing a full share of public burdens, or to acquire what is known as a "pull" over municipalities and

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legislatures, or to repress popular movements with Winchesters, will excite irritation. In this condition of things wholesale murder under forms of law, or supposed attempts to enlist the churches or the courts on the side of wealth, or to capture the press, or to suppress free speech, will, before long, excite the masses in inflammable centres to the exploding point.

I remember the time when the average American had as little doubt of the stability of the Constitution of the United States as of that of the solar system. He is not so sure now. He used to jibe at Congress, but never at the Senate. He is not so proud of the Senate now. Its performances on silver, and on the Mc-Kinley, Wilson and Dingley tariffs, have disillusioned him. The one-eyed man can see sinister influences at work. In former times, he felt that the press could be depended on as the sure bulwark of liberty. Now, he is prone to ask, who is the millionaire behind the press? Then, he believed in the ministers of religion, pointing out with pride that a state establishment was not needed to ensure devoted service of God. Now, he views the Church with suspicion, and, perhaps, calls clergymen the "watch-dogs of the propertied classes." He made sacrifices for education, and honoured college presidents and professors. But even the universities---institutions whose freedom mediæval bishops and popes respected—are now tainted. He consequently feels that the very wells from which he must drink are being poisoned, and he is beginning to suspect that a vast conspiracy is on foot to pauperize and enslave him.

Who is to blame for the change? Not the rich only. In no other country in the world, in modern times, have rich men given money so freely as in the United States for every good cause. Hardly a city can be found without some striking monument and proof of their enterprise and liberality. But the law is absolute that "to whom much is given, of them shall much be required." Are the rich, then, free from blame? Are there not numerous evidences that wealth is used unscrupulously to promote selfish interests at the expense of the public welfare? Have not rich men allowed themselves to be blinded into forgetfulness that the necessary foundations of the Republic are intelligence and righteousness, and that there can be neither the one nor the other without full freedom of thought and freedom of speech? A Californian professor wrote last year that the President of Brown University would not be allowed to retain his position long, because his views on silver conflicted with the views of the rich. Men took that merely as one of the wild words of a political campaign, but when the thing was actually attempted this last summer, thoughtful men were stupefied. It looked as if the money power were becoming blinded. It may be asked, how can

anyone condemn the action of the Trustees of Brown, when the victory of bimetallism last year would have meant dishonest money. It is surely sufficient answer to say that it did not mean that to President Andrews; nor does it mean that to the men whom the President of the United States sent to Europe to "do something for silver " or arrange for bimetallism. The Corporation of Brown made no disguise of the reasons that determined them to squeeze the President out. His views did not suit rich men, and as long as he remained at the head of the University, it would not get their money. Of course then his plain duty was to resign. It never occurred to them that universities represent the spiritual side of man, and that when they are in bondage to the material, either to millionaires, ecclesiastics or political parties, they lose that for which they exist and might as well be swept out of existence altogether. Of course they can plead as an excuse that the emphasis which is nowadays attached to money gifts led them and indeed almost every one else to lose sight of the proper functions of Universities. But the marvel is that they did not see that they were sawing off the branch on which When labour suspects that capital is determined the rich sit. that there shall not be full and free discussion of the reasons which contribute to the manufacture of millionaires at the expense of the many, it will not be content with its lot. Such a suspicion would be more fatal to public security than the Lattimer atrocity. Fortunately, the remonstrance of the twenty-four professors and the protests of the graduates have caused the trustees to resile; but their attempt will not soon be forgotten. Λ similar attempt succeeded in Chicago. Naturally enough, the silver "Tell me the judge and I will men are retaliating in Missouri. tell you the law," said an old Highlander. Is it to be now, "Tell me who endowed the university, and I'll tell you the views of the professors ?"

In British communities the executive government, which is simply a committee of Parliament, is responsible for all legislalation. In the United States, Congress is responsible, according to the Constitution; but, in reality,

in legislation. no one seems to be responsible. The Speaker now decides absolutely what Bill shall pass the House; and in the Senate a small group of Senators, interested in iron, or wool, or sugar, or lumber, calmly declare that there shall be no tariff, unless their schedules are adopted. In the last stage of the Ding-ley Bill's passage, the evolutionary process advanced another step. Senator Elkins "slipped in" or "smuggled in" a clause to discriminate against the Canadian Pacific Railway, but which, strictly interpreted, went a great deal farther; and, so amended, the Bill passed. Only when a Collector of Customs acted ac-

cording to the law, did the intruded clause come into the light; and puzzled importers appealed to the Attorney-General and asked what Congress had "intended." Of course, the Attorney-General should have answered that he had only to do with the words of the law; but the clause being calculated to hurt important sections of the Republic much, as well as the C.P.R. little, he wrestled for weeks with it, and at last decided that it was only "verbiage." So, the Executive over-rides the Legislature, a thing abhorrent to the Constitution. The end may not be yet. For the clause may get into the courts, and judges will certainly interpret the language, instead of the intention, though the intention-it may be added-was precisely the same as the language. Senator Elkins, too, like Mr. Rhodes, declares that he will try again, but that next time he will try constitutionally and succeed. He may. But what a commentary the whole wretched business is on manners and morals in high places, as well as on the strange metamorphosis of a Constitution which only a generation ago was pronounced perfect !

The Dingley Bill hits hard the Georgian Bay lumber business, and therefore all the interests of the district. It discriminates Canadian Defence, in favour of the Americans who cut our logs to manufacture them in Michigan, and against the Americans and Canadians who have their mills in

The remedy is in the hands of the Provincial and Do-Ontario. minion Governments, and both must act promptly to guard our interests. Mr. Bertram has pointed out the policy for the Pro-It has the power to make new regulations annually, all vince. timber licenses expiring on the 30th April, and its duty is to require that all lumber which may be cut thereafter shall be manufactured in Ontario. It is said that the Government cannot interfere till the close of the present season. But, in justice to all parties, it should announce its policy in advance. All licensees should have time to lease old mills or establish new ones, so as to accommodate themselves to the proposed new regulation. This would be the right policy in almost any case; and it is tenfold so where white pine is concerned, the supply of which is so limited. We protect cotton and other industries, the raw material of which we have to import; while, instead of caring for industries, in the raw material of which we may be said to have a corner, raw material too that can be converted into innumerable products, for all of which there are open markets, we see them struck down and hesitate about giving them a fair field !

The Dominion Government has also a plain duty to discharge in the premises. While the matter was under debate in Congress, it took power from Parliament to impose an export duty on logs, should the threatened high duty be imposed on sawn

lumber. That meant that it would use the power, if the high duty were imposed contrary to the compromise of 1890, or it simply meant bluff. Now, whatever other countries do, let us hope that no Canadian government shall ever stoop to that degrading game. Even if we lose by it, the Government must use the power it took. Every day's delay is a mistake. An export duty on logs is, besides, in our immediate as well as in our permanent interest; for should the Province act in the line suggested by Mr. Bertram, the Michigan licensees would at once increase their cut of logs, thus stripping us of an immense amount of valuable raw material, which no other country can supply.

The policy proposed is not only in our own interest, but in that of the people of the United States. The duty was imposed by Congress at the instance of a few mill owners, to put millions in their pockets by raising the price of all wood products to their people. It is not for us to assist them in playing such a game. The whole matter has been well threshed out, and, of course, something can be said on both sides; but the supreme point from which it should be regarded, is the dignity and honour of the country, from which its true interest can never be separated. If there are any industries, next to the agricultural, for which Nature has fitted Canada, they are those connected with the manufacture of wood; and there are vast districts where all other industries depend on these for their life-blood. To make our people merely cutters of logs, for another people to expend skilled labour on, is to doom those districts to stagnation, and to break faith with the settlers, traders, transportation companies, banks, and with all the numerous little industries that cluster round manufactures which are rooted in natural conditions.

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